

APPENDIX A

PUBLIC COMMENTS

PART 3 OF 4

**ALL PERSONALLY IDENTIFYABLE INFORMATION
OF PRIVATE CITIZENS, EXCEPT ACTING IN A
PROFESSIONAL CAPACITY, HAS BEEN
REDACTED IN ACCORDANCE WITH LR 8.1(a)**

Comment A-123

Part 2

GreenSuite® for chemicals, products, manufacturing processes, wastestreams, supply chain, and student tutorial; development of a holistic hazard warning SAF-T-LABEL© system; and publication of 21 books on hazardous chemicals.

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1980 – 1983

International Flavors and Fragrances Incorporated, Union Beach, NJ

Director, Corporate Safety Assurance (CSA) & Medical Department: Establishment and worldwide coordination of all Corporate safety activities, including regulatory interactions, personnel, budgets and research orientation; integration of computerization techniques and health/safety criteria for products (flavors and fragrances), employees (medical, industrial hygiene and safety) and environment (air, water, ground); develop 3-5 year objectives for Corporate and industry safety policies and procedures; formulate anticipatory contingency plans for Corporate and industry crises (e.g., carcinogen policy, mutagenicity liabilities, etc.); identification and justification of biological research objectives for the Corporation including basic and applied projects: mechanisms of sensitization induction, inhibition of sensitization reactions, flavors and fragrances and biological attractants and repellants, stress modification through flavor and fragrance applications, anti-tumor effects of flavor and fragrance chemicals, hormonal and behavioral changes following flavor and fragrance consumption.

1979 – 1980

International Flavors and Fragrances Incorporated, Union Beach, NJ

Manager, Product Safety Assurance (PSA): Supervision of entire PSA Department including personnel, research projects, policy development and implementation; creation of a Product Safety/Regulatory System and staff; development of long-range U.S. and international scientific, regulatory and administrative strategies for toxicology; computerization of toxicology research, regulatory and administrative procedures; liaison with government, customers and other companies; evaluation and implementation of new experimental techniques.

1976 – 1979

International Flavors and Fragrances Incorporated, Union Beach, NJ

Manager, Product Safety Systems: Prepared corporate executive presentation that justified departmental staff and research expansion; design and implement automated procedures for product safety assurance decisions; implement staff expansion and train individuals; coordinate world-wide implementation of automated procedures.

1973 – 1976

Abbott Laboratories, No. Chicago, IL

Head, General Toxicology Section: Staff expansion, orientation and training; experimental design for fulfillment of IND and NDA requirements; development and assessment of toxicological methods; supervision of acute, subacute and chronic toxicological experiments; coordination and supervision of 12 personnel; budgetary and long-term logistical planning; evaluation of toxicological, clinical pathological and histopathological data; development of additional organ function tests; management training seminars (value analysis, Impact [MBO] goals); liaison with medical, pharmacology, chemistry and biochemistry departments and divisions; resolution of "special" toxicological problems (cyclamate negotiations with FDA, UK/Japan, anti-cancer technique evaluation, computerization of administrative procedures).

1972 – 1973

ICI America, Inc., formerly Stuart Pharmaceuticals & Atlas Chemical Industries, Inc., Wilmington, DE

Supervisor of Toxicology: Staff development and re-alignment, project prioritization; experimental design for fulfillment of IND and NDA requirements; development and assessment of toxicological methods; supervision of acute, subacute and chronic toxicological experiments; coordination and supervision of 15 personnel; budgetary and long term logistical planning; evaluation of toxicological, clinical pathological and histopathological data.

1969 - 1972

Mason Research Institute, Worcester, MA

Toxicologist: Contract supervision, personnel training and management, proposal writing, contract negotiation, data acquisition and reporting, animal handling and colony maintenance; assistant to the President (last eight months); developed and implemented research project that documented irreversible brain pathology and biochemistry of marijuana active ingredients (tetrahydrocannabinols) that prevented anticipated federal legalization in the early 1970s.

1965 - 1969

Department of Pharmacology and Toxicology, School of Pharmacy

Oregon State University, Corvallis, OR

Research Assistant: Graduate research and student pharmacology laboratory instruction; dissertation on first class of anticancer chemicals that crossed the blood brain barrier.

1964 - 1965

Agriculture Chemistry Department

Student Researcher: Pesticide separation and analysis.

UNIVERSITY EDUCATION

B.S., General Science/Pre-Medicine, Oregon State University, 1965

Ph.D.s, Toxicology & Psychopharmacology, Oregon State University, 1969

SOCIETY MEMBERSHIPS (Historical)

- ❖ American Association for the Advancement of Science
- ❖ American Chemical Society
- ❖ American College of Toxicology
- ❖ American Society of Pharmacology and Experimental Therapeutics
- ❖ Environmental Business Association of New Jersey
- ❖ Environmental Mutagen Society
- ❖ Genetic Toxicology Association
- ❖ Institute of Food Technologists
- ❖ International Society of Ecotoxicology and Environmental Safety

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- ❖ National Fire Protection Association
- ❖ Society for Chemical Hazard Communication
- ❖ Society of Cosmetic Chemists
- ❖ Society of Toxicology
- ❖ Toxicology Forum

SPECIAL TRAINING

- ❖ Personal Leadership: *13-week course in motivational techniques taken with Success Motivation Institute (30 hours of instruction), 1974.*
- ❖ Psychological Counseling: *4-week course in personal problem identification and resolution taught by a team consisting of a clinical psychiatrist, a psychologist, a sociologist, an industrial psychologist and a group psychological therapist (20 hours of instruction), 1975.*
- ❖ Computerization of Administrative Procedures: *Special assignment in Abbott Pathology/Toxicology Division (20 hours per week for three months), 1975* *Similar, but broader assignment with International Flavors and Fragrances Incorporated for two years.*
- ❖ Management Styles and Motivation: *36 hours of instruction pertaining to leadership functions, organization dimensions, motivational concepts, self-appraisal, decision making, goal setting and follow-up, 1975.*
- ❖ Employee Motivation: *An 8-hour seminar pertaining to improving employee commitment and productivity, developing leadership skills and resolving conflict, 1981.*
- ❖ Safety Program Management (Advanced): *A 14-hour seminar related to the application of behavioral/motivational strategies to increase program effectiveness, analyzing cost saving factors and development of comprehensive management systems.*
- ❖ NJ DOH Certified Right to Know Consultant (*New Jersey Department of Health, Right to Know Program*).
- ❖ Lay Minister: The Church of Jesus Christ of Latter-day Saints, 1965 - Present

FSE CONFERENCES ORGANIZED

- ❖ Skin The Barrier: In Vitro Assessment and Prediction Techniques; Newark, NJ, July 18-19, 1983
- ❖ Alternatives To In Vivo Bioassays For Risk Assessment: Worldwide Impact; Washington, DC, November 9-11, 1983
- ❖ First National Conference on Hazardous Materials in School and Colleges; Philadelphia, PA, April 21-22, 1988
- ❖ Second National Conference on Hazardous Materials in Schools and Colleges; Washington, DC, January 27-30, 1991

HONORS AND SPECIAL AWARDS

- ❖ Eagle Scout with Bronze and Silver Palms, 1958
- ❖ March of Dimes Scholastic Excellence Scholarship, 1961
- ❖ Dean's List, multiple years
- ❖ Symposia Chairman, Toxicology-Consumer Product Safety; 13th Middle Atlantic Regional Meeting,
- ❖ American Chemical Society, March 21, 1979
- ❖ Society of Toxicology; Nominating Committee, 1980-81
- ❖ Environmental Mutagen Society; Workshops & Training Committee, 1980-82
- ❖ Chairman of Society of Toxicology Session, 1982
- ❖ New Jersey Department of Health, Industrial Advisory Committee, (for the development of right-to-know regulations), January-July, 1983
- ❖ Society of Toxicology; Technical Committee, 1984-85

- ❖ American Association of Radon Scientists and Technologists; Board of Directors, 1986
- ❖ Hilltop Country Day School; President, Board of Trustees, 1992-1994
- ❖ State of New Jersey; Pollution Prevention Advisory Board (Gubernatorial appointment), 1993-1994
- ❖ New Jersey Cure Autism Now! (NJ-CAN); Trustee, 1997; Research Director, 1997
- ❖ Coalition for Autism Research, Education and Support (CARES); Chairman, Board of Directors, 1997-1998
- ❖ Munition Emissions Advisory Group (MEAG); U.S. Army Defense Ammunition Center, Co-Chair, 2000-2001
- ❖ Government Co-Op Working Group; U.S. Army Defense Ammunition Center, Member, 2001-2003
- ❖ More Excellence in Education Foundation, Sparta, NJ; Founder & Chairman, Board of Directors, 2002-2003
- ❖ Citizens for a Quality Sparta Education, Sparta, NJ; Founder & Executive Committee Chairman, 2007 – present
- ❖ Chair, Greener Chemicals Characteristics Task Group (ANSI 355 Greener Chemicals and Processes Information National Standard), 2009-2011
- ❖ CINF Best Presentation Award, 239th ACS National Meeting, San Francisco, CA, 2010

LISTED IN (Historical)

- ❖ American Men and Women of Science
- ❖ Who's Who in Technology Today

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PUBLISHED BOOKS

1. Compact School and College Administrator's Guide for Compliance with OSHA Hazard Communication Standards
2. Written Hazard Communication Program for Schools and Colleges
3. Concise Manual of Chemical and Environmental Safety in Schools and Colleges,
VOLUME 1: Basic Principles
4. Pocket Guide to Chemical and Environmental Safety in Schools and Colleges,
VOLUME 1: Basic Principles
5. Concise Manual of Chemical and Environmental Safety in Schools and Colleges,
VOLUME 2: Hazardous Chemical Classes
6. Pocket Guide to Chemical and Environmental Safety in Schools and Colleges,
VOLUME 2: Hazardous Chemical Classes
7. Concise Manual of Chemical and Environmental Safety in Schools and Colleges,
VOLUME 3: Chemical Incompatibilities
8. Pocket Guide to Chemical and Environmental Safety in Schools and Colleges,
VOLUME 3: Chemical Interactions
9. Concise Manual of Chemical and Environmental Safety in Schools and Colleges,
VOLUME 4: Safe Chemical Storage
10. Pocket Guide to Chemical and Environmental Safety in Schools and Colleges,
VOLUME 4: Safe Chemical Storage
11. Concise Manual of Chemical and Environmental Safety in Schools and Colleges,
VOLUME 5: Safe Disposal of Chemicals
12. Pocket Guide to Chemical and Environmental Safety in Schools and Colleges,
VOLUME 5: Safe Disposal of Chemicals
13. Handbook of Chemical and Environmental Safety in Schools and Colleges
14. Compendium of Hazardous Chemicals in Schools and Colleges
15. List of Lists of World-Wide Hazardous Chemicals and Pollutants
16. Cross-Reference Dictionary of Hazardous Chemicals and Pollutants
17. Index of Hazardous Contents of Commercial Products in Schools and Colleges
18. Handbook of Chemical and Environmental Safety
19. Web-based Munition Automated Environmental Analytical Capabilities
20. Skin The Barrier: In Vitro Assessment & Prediction Techniques
21. Alternatives to In Vivo Bioassays for Risk Assessment: World-Wide Impact

TECHNICAL PUBLICATIONS

1. Ph.D. Dissertation, Oregon State University, June 1969: "Studies on the Toxicity of the Carcinostatic Compound 1, 3-Bis (2-chloroethyl)-1- nitro-sourea (BCNU)."
2. The Hepatotoxicity of 1, 3-Bis (2-chloroethyl)-l-nitrosourea (BCNU) in Rats; George R. Thompson and Robert E. Larson; *J. Pharmacol. Exp. Ther.* 166: 104-112, 1969.
3. Phenester (NSC 116 785): Convulsive Properties of an Alkylating Agent with Antitumor Activity; U. Schaeppi, G.R. Thompson, S. Stadnicki, R. Phelan, D. A. Cooney and R. D. Davis; *Toxicol. Appl. Pharmacol.* 18: 841- 850, 1971.
4. A Toxicological Comparison of the Potency and Activity of 1,3-Bis(2- chloroethyl)-1-nitrosourea (BCNU) and 1-(2-chloroethyl)-3-cyclohexyl- 1-nitrosourea (CCNU) in Mice and Rats; George R. Thompson and Robert E. Larsen; *Toxicol. Appl. Pharmacol.* 21: 405-413, 1972.
5. Preclinical Toxicological Evaluation of Bleomycin (NSC 125 066): A New Carcinostatic Antibiotic; George R. Thompson, John R. Baker, Robert W. Fleischman, Harris Rosenkrantz, Ulrich H. Schaeppi, David A. Cooney and Ruth D. Davis; *Toxicol. Appl. Pharmacol.* 22: 544-555, 1972.
6. Bleomycin Induced Interstitial Pneumonia in Dogs; Robert W. Fleischman, John R. Baker, George R. Thompson, Ulrich H. Schaeppi, Vladimir R. Illievski, David A. Cooney and Ruth D. Davis; *Thorax* 26: 675-682, 1972.
7. Azaserine Induced Mandibular Salivary Gland Pathology in Dogs; Robert W. Fleischman, John R. Baker, Ulrich H. Schaeppi, George R. Thompson and Harris Rosenkrantz; *Toxicol. Appl. Pharmacol.* 22: 595-606, 1972.
8. The Development of Formulations for the Chronic Oral and Parenteral Administration of Marihuana Constituents to Laboratory Animals; Harris Rosenkrantz, George R. Thompson and Monique C. Braude; *J. Pharm. Sci.* 61: 1106-1112, 1972.
9. Preclinical Toxicologic Evaluation of Bleomycin (NSC 125 066) in Rhesus Monkeys; U. Schaeppi, G.R. Thompson, R. W. Fleischman, J. R. Baker, H. Rosenkrantz, V. Illievski, D. A. Cooney and R. D. Davis; *Cancer Chemother. Rep.* 4: 31-39, 1973.
10. Comparison of Acute Oral Toxicity of Cannabinoids in Rats, Dogs, and Monkeys; George R. Thompson, Harris Rosenkrantz, Ulrich H. Schaeppi and Monique C. Braude; *Toxicol. Appl. Pharmacol.* 25: 363-372, 1973.
11. Chronic Oral Toxicity of Cannabinoids in Rats; George R. Thompson, Marcus M. Mason, Harris Rosenkrantz and Monique C. Braude; *Toxicol. Appl. Pharmacol.* 25: 373-390, 1973.
12. Pathological Effects of Bleomycin on the Skin of Dogs and Monkeys; John R. Baker, Robert W. Fleischman, George R. Thompson, Ulrich Schaeppi, Vladimir Illievski, David A. Cooney and Ruth D. Davis; *Toxicol. Appl. Pharmacol.* 25: 190-200, 1973.
13. Oral and Intravenous Toxicity of ⁹-Tetrahydrocannabinol in Rhesus Monkeys; George R. Thompson, Robert W. Fleischman, Harris Rosenkrantz and Monique C. Braude; *Toxicol. Appl. Pharmacol.* 27: 648-665, 1974.
14. A Versatile Unit of Filling Gelatin Capsules with Drugs or Chemicals; George R. Thompson and Adam Cunningham; *J. Pharm. Sci.* 64: 320-322, 1975.
15. Effects of ⁹-Tetrahydrocannabinol Administered Subcutaneously to Rabbits for 28 Days; George R. Thompson, Harris Rosenkrantz, Robert W. Fleischman and Monique C. Braude; *Toxicology* 4: 41-51, 1975.
16. Assessment of the Carcinogenicity of Non-nutritive Sweeteners: I. Saccharin; B. A. Becker and G.R. Thompson; *Proc. West. Pharmacol. Soc.* 18: 306-310, 1975.
17. Assessment of the Carcinogenicity of Non-nutritive Sweeteners: II. Cyclamates and Cyclohexylamine; G.R. Thompson, B. A. Becker and S. Levin; *Proc. West. Pharmacol. Soc.* 18: 311-318, 1975.

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18. Comparative Toxicities of Synthetic Cannabinoid Congeners; G.R. Thompson and C. L. Yang; Symposium on "The Therapeutic Aspects of Marijuana", 1975.
19. Cyclamates - Scientific Demise or Political Intrigue?; George R. Thompson, in Origins of Human Cancer: FDA - Cyclamate (Public Policy Panel); H. H. Hiatt et al eds., Cold Spring Harbor Laboratory, Cold Spring Harbor, New York, Vol. 4, 1976.
20. Stable Nonaqueous Sodium Pentobarbital Solutions for Use in Laboratory Animals; S. Borodkin, L. Macy, G.R. Thompson and R. Schmits; *J. Pharm. Sci.* 66: 693-695, 1977.
21. Testicular Effects of Cyclohexylamine Hydrochloride in the Rat; P. L. Mason and G.R. Thompson; *Toxicology* 8: 143-156, 1977.
22. Hydroxycitronellal - A Survey of Consumer Patch-Test Sensitization; R. J. Steltenkamp, K. A. Boaman, J. Dorsky, T. O. King, A. S. Rothenstein, E. A. Schwoeppe, R. I. Sedlak, T. H. F. Smith, and G.R. Thompson; *Food & Cosmet. Toxicol.* 18: 407-412, 1980.
23. Citral - A Survey of Consumer Patch-Test Sensitization; R. J. Steltenkamp, K. A. Boaman, J. Dorsky, T. O. King, E. A. Schwoeppe, A. S. Rothenstein, R. I. Sedlak, T. H. F. Smith, and G.R. Thompson; *Food & Cosmet. Toxicol.* 18: 413-418, 1980.
24. Cinnamic Alcohol - A Survey of Consumer Patch-Test Sensitization; R. J. Steltenkamp, K. A. Boaman, J. Dorsky, T. O. King, A. S. Rothenstein, E. A. Schwoeppe, R. I. Sedlak, T. H. F. Smith, and George R. Thompson; *Food & Cosmet. Toxicol.* 18: 419-424, 1980.
25. Toxicology Advisory Guidelines for Fragrance Safety Assurance; G.R. Thompson, F. H. Stults, E. J. Moran, K. Tyburcy, D. M. Ford, L. G. Scharpf, Jr.; in Mechanisms of Toxicity and Hazard Evaluations, Proceedings, Second International Congress on Toxicology, B. Holmstedt et al eds, Elsevier, 1980, p. 489-493.
26. SDA Fragrance Subcommittee Report: Industry Surveys Fragrance Sensitization Test Data; R. J. Steltenkamp, K. A. Boaman, J. Dorsky, K. Kohrman, A. S. Rothenstein, E. A. Schwoeppe, R. I. Sedlak, G.R. Thompson; *Perfumer and Flavorist* 6: 35-44, 1981.
27. A Toxicological Comparison of Five Dioxolane Derivatives and Phenobarbital; George R. Thompson, Stanley J. Rzucidlo, George E. Fillmore, James W. Kesterson and A. Clark Kahn III; submitted, 1983.
28. Isoeugenol-A Survey of Consumer Patch-Test Sensitization; G.R. Thompson, K. A. Boaman, J. Dorsky, K. Kohrman, A. S. Rothenstein, E. A. Schwoeppe, R. I. Sedlak, R. J. Steltenkamp; *Food & Cosmet. Toxicol.* 21: 735-740, 1983.
29. Eugenol and Clove Leaf Oil - A Survey of Consumer Patch-Test Sensitization; A. S. Rothenstein, K. A. Boaman, J. Dorsky, K. Kohrman, E. A. Schwoeppe, R. I. Sedlak, R. J. Steltenkamp, G.R. Thompson; *Food & Cosmet. Toxicol.* 21: 727-733, 1983.
30. Benzyl Salicylate - A Survey of Consumer Patch-Test Sensitization; K. Kohrman, K. A. Boaman, J. Dorsky, A. S. Rothenstein, R. I. Sedlak, R. J. Steltenkamp, G.R. Thompson; *Food & Cosmet. Toxicol.* 21: 741-744, 1983.
31. Cinnamic Aldehyde - A Survey of Consumer Patch-Test Sensitization; P. J. Danneman, K. A. Boaman, J. Dorsky, K. Kohrman, A. S. Rothenstein, R. I. Sedlak, R. J. Steltenkamp, G.R. Thompson; *Food & Cosmet. Toxicol.* 21: 721-725, 1983.
32. Chemical and Environmental Safety - Employee Right-To-Know (Written Training Manual); George R. Thompson, Copyright: The Forum for Scientific Excellence, Inc., Sparta, NJ, 1985.
33. Chemical Hazards In Our Schools, Right-To-Know Compliance: A Survey of School District Responses and Experiences; George R. Thompson and Arthur J. Lange; *School Leader* 15(3): 21-25, 1985.
34. Graphic Arts Employers Guidelines for Compliance With the OSHA Hazard Communication Standard; George R. Thompson & Arthur J. Lange; Copyright: The Forum for Scientific Excellence, Inc., Sparta, NJ, 1985.

35. Chemical and Environmental Safety - Employee Hazard Communication (Written Training Program); George R. Thompson and Arthur J. Lange; Copyright: The Forum for Scientific Excellence, Inc., Sparta, NJ, 1985.
36. Chemical and Environmental Safety - Employee Right-To-Know (Miranol Chemical Company, Policies and Program); George R. Thompson and Arthur J. Lange; Copyright: The Forum for Scientific Excellence, Inc., Sparta, NJ, 1985.
37. New Jersey Public Employees Occupational Safety and Health Act B (PE-OSHA): A New 1986 School District Compliance Responsibility; George R. Thompson and Arthur J. Lange; NJASA Perspective IV(2): 14-16, 1986.
38. Right to Know Compliance, An Opportunity for Improvement; George R. Thompson and Arthur J. Lange; School Leader 16(1): 27-29, 1986.
39. Acquisition of "Green" Products and Munitions—Automated Assessments; George R. Thompson, Kevin Kennedy, Tyrone D. Nordquist; Federal Facilities Environmental Journal, Autumn 2005.

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Government Accountability Project East Palestine Investigation

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EXHIBIT 28

February 1, 2024

Over 1,500 Pages of East Palestine Dioxin-Related Testing Found Buried on EPA Website

WASHINGTON – Recently, our whistleblower client and independent scientist, Scott Smith, discovered dioxin and related testing done by Norfolk Southern paid consultant, Arcadis, and involving the EPA that began on February 9, 2023. The finding this week revealed Norfolk Southern and their consultants sampled soil and water and found elevated levels of dioxin and other dangerous compounds in East Palestine as early as February 9, 2023.

Despite the EPA claiming the dioxin levels on East Palestine were, at first non-existent and then safe, along with other chemicals, for residents, these documents are evidence that Arcadis performed dioxin and other chemical testing as early as February 9th that showed concerning levels of these chemicals. By burying them in thousands of pages of responsive documents posted on the EPA website, the agency continued to deny the need to test for dioxins and these other chemicals including air testing in homes and soil testing at homes. The EPA officially stated that they started dioxin testing in March, while knowing there was dioxin testing already completed in February, after pressure from lawmakers, scientists and the public.

The EPA has continued to tell the public that the community and their homes are safe while refusing to test the interior of their homes for dioxins and other volatile organic chemicals and semi volatile organic compounds along with soil testing.

The testing from February 17 shows dioxin TEQ concentrations at 91.9 parts per trillion, 19 times higher than the 4.8 parts per trillion residential screening level, which is the level at which immediate follow up sampling is required.

Although some of these tests may have been characterized as “waste” and buried on the EPA website, these tests results appear to show the fingerprint identity of the dangerous chemicals from the toxic plume along with concerning levels from the plume fallout that was deposited in and around East Palestine. The EPA was not transparent in communicating these testing results directly to the community and the fact that dioxin testing began on February 9, 2023.

This comes as we continue to wait for an additional 2,000 documents in relation to our previous public records request to the EPA concerning communications regarding our whistleblower client Scott Smith and his independent dioxin testing in East Palestine. We also are awaiting documents from our FOIA on EPA’s communications with Facebook about Smith, and residents in East Palestine. In addition, another [FOIA](#) was filed Tuesday regarding the Federal Emergency Management Agency and their lack of

communication about the East Palestine unmet needs report due to President Biden weeks ago.

On Saturday, February 3, the one-year anniversary of the train derailment, people will be gathering with scientists, residents, whistleblowers, and others to learn about the effects of the burning chemicals in East Palestine as well as the EPA's malfeasance in caring for and cleaning up the community. More shocking new details will be revealed at the presentation concerning the newly uncovered documents, independent testing results, and other results of our investigation. Speakers include Smith, our Environmental Investigator, Lesley Pacey, as well as Erin Brockovich and Science Director for the Center for Health, Environment and Justice, Stephen Lester.

These discoveries and efforts are made possible by incredibly strong and brave whistleblowers, like Scott Smith. Through his fearless whistleblowing, we have learned about the true levels of toxic chemicals in the East Palestine community in the air, water, surfaces and subsurface. We also have filed FOIAs to uncover the truth the government's response and launched an investigation into the true impact of the horrific accident in the small Midwest community.

Whistleblower client, Scott Smith, commented: "It is unfortunate that the EPA and Norfolk Southern refused to sit down with me and exchange, in reciprocity, detailed testing information per my e-mail to them on July 27, 2023. Despite the smear and defamation campaigns launched against me by the EPA and Norfolk Southern, I would still welcome the opportunity to meet with the EPA and Norfolk Southern to go over detailed testing reports in reciprocity for the benefit of the East Palestine community."

Lesley Pacey, Environmental Investigator, stated: "We are thankful for Scott Smith and his efforts to find the truth for the people of East Palestine. That perseverance led to multiple trips to East Palestine to test for dioxins and other toxins as well as the discovery of documents that clearly show the EPA and Norfolk Southern tested for and were aware of the presence of dioxin contamination in East Palestine long before bowing to public pressure to test for dioxins. It's stunning to see that the EPA found harmful levels of dioxins in East Palestine when they were pushing the false narrative that dioxin testing was not needed in East Palestine. They should have warned residents and announced these findings publicly. Instead, they made the unconscionable decision to continue to claim dioxin levels are not concerning and the community is safe from chemicals spilled and burned after the derailment."

Contact: Andrew Harman, Communications Director

Email: andrewh@whistleblower.org

Phone: 202-449-6042

Government Accountability Project

Government Accountability Project is the nation's leading whistleblower protection organization. Through litigating whistleblower cases, publicizing concerns and developing legal reforms, Government Accountability Project's mission is to protect the public interest by promoting government and corporate accountability. Founded in 1977, Government Accountability Project is a nonprofit, nonpartisan advocacy organization based in Washington, D.C.

EXHIBIT 29

February 9, 2024

EPA Continues Denial of Elevated Dioxin Levels in East Palestine, Ohio

WASHINGTON – Yesterday, the Environmental Protection Agency (EPA) released a statement on their response to our press release on the inaccurate dioxin reporting the agency conducted in East Palestine, Ohio. The agency stated, “Recent reporting on this issue is inaccurate and mischaracterizes EPA’s response and commitment to transparency.” Our report stated testing done by Norfolk Southern paid consultant, Arcadis, for dioxins and other toxic chemicals began as early as February 9, 2023. In this testing, the results came back showing elevated levels of dioxins and other chemicals known to cause cancer. It was not until East Palestine residents and advocates repeatedly requested the data and information that the agency sent them a letter with the results in September 2023. The results were posted on the website in May without revealing the results to the residents and buried among over 1,000 pages of miscellaneous documents.

Among the buried documents were the test results for dioxin, which were well above the safety threshold. Despite the EPA publicly stating from the onset of the derailment that they have no concern to believe dioxins posed a threat to the community, residents of the village are continuing to experience significant medical symptoms as a result of the exposure to the chemicals.

We will continue to stand behind our whistleblower client, Scott Smith, and the independent test results he finds. In addition to the continued support of Smith’s efforts, we also hold firm we will uncover more answers through our Freedom of Information Act (FOIA) requests. Smith has used his own time and money to properly test the community for the devastating chemicals and continues to fight for justice.

Environmental Investigator, Lesley Pacey commented:

“We have specifically stated that the EPA results were buried on the EPA website and could find no evidence of the EPA discussing and/or openly disclosing these results in public meetings with the community. Unbeknownst to the general public, a link to the results was embedded in a letter to two community leaders in September 2023, who in turn shared the letter with their organization members. However, there is no evidence that the EPA shared this information otherwise, verbally or in print, beyond that one instance. To say anything otherwise is simply disingenuous. Going back and forth with the EPA, which seems more interested in protecting their image than safeguarding the health of the people of East Palestine and surrounding communities, wastes precious time that residents do not have to understand the threat of the environmental contamination.”

Legal Director, Tom Devine, commented:

““It is time to start holding the EPA accountable. All the bureaucratic smokescreens fail to deny some basic truths: The EPA knew there were high dioxin levels when it told everyone not to worry. The EPA was present when the decision was made to burn the contents of vinyl chloride railway cars in East Palestine. And it failed to test the resulting plume, at least as far as we are able to establish to date. That is why Government Accountability Project defends courageous whistleblowers like Scott Smith who are telling it like they see it, which seems a lot closer to reality than what we are getting from various government entities and corporate interests.”

Contact: Mary Allain, Interim Communications Director
Email: marya@whistleblower.org
Phone: (202) 449-6042

Government Accountability Project

Government Accountability Project is the nation’s leading whistleblower protection organization. Through litigating whistleblower cases, publicizing concerns and developing legal reforms, Government Accountability Project’s mission is to protect the public interest by promoting government and corporate accountability. Founded in 1977, Government Accountability Project is a nonprofit, nonpartisan advocacy organization based in Washington, D.C.

EXHIBIT 30

February 15, 2024

President Joe Biden
1600 Pennsylvania Avenue, N.W.
Washington, DC 20500

EPA Administrator Michael Regan
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

RE: Recommendations for East Palestine and nearby communities

Dear President Biden and EPA Administrator Regan:

As you prepare to visit East Palestine this week, we would like to offer recommendations on steps that your administration can and must take to continue to provide critical assistance to the people of East Palestine and nearby communities.

Approximately one year ago, a Norfolk Southern train carrying more than 150 cars, a number of which contained toxic chemicals, derailed in East Palestine, Ohio and numerous cars containing hazardous chemicals and plastics burned. After the initial fire was extinguished, attention was drawn to one of the cars containing vinyl chloride. The incident command decided to burn the contents of five rail cars containing vinyl chloride. That decision we now know, according to the owners of the vinyl chloride, was not necessary. This purposeful release and burn of the known human carcinogen vinyl chloride unleashed a huge black cloud of particulates that enveloped the surrounding neighborhoods and farms in both Ohio and Pennsylvania.

Following the burn, people in East Palestine, Ohio, and nearby border towns in Pennsylvania began reporting adverse health symptoms including headaches, nose bleeds, skin rashes, central nervous symptoms, thyroid problems, and more. These and other adverse health problems continue to plague many of the residents of this rural area.

Scientifically, no one may ever be able to say with certainty all of the chemicals people were exposed to, the concentrations of the chemicals, or how long the exposure lasted. The CDC has stated that people were exposed to a broad mixture of toxic chemicals and confirmed that the combined and cumulative effects are unknown; however, the CDC also attempted to console the community with assurances that their anticipated cancers were treatable.

The people in East Palestine, Ohio, and the surrounding area face very similar uncertainties about their health as were faced by two other American populations: first responders, residents, workers, and others exposed to toxic smoke resulting from the destruction of the World Trade Center towers in New York City, and American soldiers exposed to emissions from burn pit smoke in Iraq and Afghanistan. In both of these situations, the federal government recognized that critical scientific information linking exposures and health outcomes was impossible to assess, missing, or incomplete. To address the needs of the victims/survivors, the federal government decided to use a presumptive approach that exposures were likely to be the cause of the health problems suffered by these people.

By acknowledging the large scientific uncertainties about both exposure and anticipated health outcomes, the government was able to provide health care, treatment, compensation, appeals, and other assistance to people exposed to toxic substances. In and around East Palestine, where people have been exposed to toxic chemicals resulting from the train derailment and subsequent intentional burn, the government should take similar action once again to protect these innocent people exposed to toxic chemicals.

For these reasons, we strongly recommend that the federal government issue a “major disaster declaration” and work with Senators J.D. Vance, Sherrod Brown, Bob Casey, John Fetterman, and members of Congress to do the following:

1. **Provide immediate and long-term healthcare** for the community of East Palestine, in nearby Ohio and Pennsylvania, and other states and communities that have been exposed to the toxic chemical mixture resulting from the derailment, chemical spill, and intentional burn;
2. **Set up a long-term medical monitoring** program to follow these communities and any individuals who were in the area over time for a minimum of 20 years;
3. **Provide all financial resources for relocation** that make it possible for anyone living or who lived in the area who feels they were impacted by hazardous exposure from the train derailment and burn who want to leave the area to do so and move into equivalent housing, and develop a program to replace all household items that may have been contaminated;
4. **Conduct comprehensive indoor air** testing for anyone in the area who feels they have been exposed or have endured latent exposure due to contaminated waterways, especially homes, businesses, and other buildings near Sulphur Run where vapor intrusion may be occurring;
5. **Conduct long-term, robust assessments for hazardous chemicals that may have contaminated the drinking water**, both for municipalities and especially for people who rely on well water in East Palestine and nearby communities and anyone who feels their drinking water may have been impacted by the derailment and subsequent release and burn of chemicals; and
6. **Significantly expand sampling for dioxins and furans** in residential soil, indoor dust, fish, farm animals, wildlife, and other relevant environmental media in East Palestine and nearby communities that may have been impacted.

In addition, we were pleased to see that EPA recently announced that it was beginning a process under the Toxic Substances Control Act (TSCA) to evaluate vinyl chloride. **Such a process should end with a ban on vinyl chloride.**

These recommendations are consistent with the recommendations of many people who live in the area, elected officials, community and environmental groups, and public health experts who have advocated for solutions over the last year. As you prepare to visit East Palestine this week, now is the time for you to adopt and aggressively put these common-sense recommendations into practice.

Thank you for your consideration of this urgent public health and environmental justice matter.

Sincerely,

Jess Conard, East Palestine resident
Beyond Plastics
Ohio

Hilary Flint, Director of Communications and
Community Engagement
**Beaver County Marcellus Awareness
Community**
Pennsylvania

Daniel Winston, Executive Director
Impact Appalachia
Ohio

Jami Wallace, Founder and Board President
Unity Council for the EP Train Derailment
Ohio

Eric Cozza, Board Member
Unity Council for the EP Train Derailment
Ohio

Candice DeSanzo, Board Member
Unity Council for the EP Train Derailment
Ohio

Tamara Freeze, Board Member
Unity Council for the EP Train Derailment
Ohio

Zsuzsa Gyenes, Board Member
Unity Council for the EP Train Derailment
Ohio

Sherri Mackenstein, Board Member
Unity Council for the EP Train Derailment
Pennsylvania

Christina Siceloff
Unity Council for the EP Train Derailment
Pennsylvania

██████████ MPH, IPC
East Palestine Resident
Ohio

██████████ Resident/Business Owner
Ohio

Hilary OToole, MEd
**Beaver County Marcellus Awareness
Community (BCMAC)**
Pennsylvania

Peggy Berry, PhD, RN, COHN-S, FAOHN,
Executive Director
Between the Waters
Ohio

Kidest Gebre, Communications and
Environmental Campaigns Manager
Black Appalachian Coalition
Ohio

Marcia Dinkins, Bishop
Black Appalachian Coalition
Ohio

Vicky Abou-Ghalioum,
Buckeye Environmental Network
Ohio

Lea Harper, Managing Director, Master in
Organization Development
FreshWater Accountability Project
Ohio

Greg Coleridge, Co-Director
Move to Amend
Ohio

Peggy Berry, PhD, RN, COHN-S, FAOHN,
Executive Director
Ohio Association of Occupational Health
Ohio

Jill Hunkler, Director
Ohio Valley Allies
Ohio

John H. Payne, Dr.
Payne Energy LLC
Ohio

Timothea Deeter, Community Organizer
River Valley Organizing
Ohio

Jamie Nentwick, Environmental organizer
River Valley Organizing
Ohio

Cathy Becker, Steering Committee Member
Save Ohio Parks
Ohio

Peggy Ann Berry, PhD, RN, COHN-S, FAAOHN, CEO
Thrive at Life: Working Solutions
Ohio

Nickole Nesby, Mayor
412 Justice
Pennsylvania

Kristin Volchansky, Advocacy Director
Action Together NEPA
Pennsylvania

Karen Feridun, Co-founder
Better Path Coalition
Pennsylvania

Rebecca Roter, Chairperson
Breath Easy Susquehanna County
Pennsylvania

Debra Smit, Communications Director
Breathe Project
Pennsylvania

Matthew Mehalik, Executive Director
Breathe Project
Pennsylvania

Lisa DePaoli, Communications Director
Center for Coalfield Justice
Pennsylvania

Andrew Woomer, Advocacy Coordinator
Clean Air Council
Pennsylvania

Lois Bower-Bjornson, Field organizer
Clean Air Council
Pennsylvania

Sandy Field, Chair
Climate Reality Project: Susquehanna Valley PA
Pennsylvania

Tracy Carluccio, Deputy Director
Delaware Riverkeeper Network
Pennsylvania

Robin Lesko, Western PA Organizing Manager
Food & Water Watch
Pennsylvania

Shannon Smith, Executive Director
FracTracker Alliance
Pennsylvania

Patrice Tomcik, National Field Director
Moms Clean Air Force
Pennsylvania

Ashley Funk, Executive Director
Mountain Watershed Association
Pennsylvania

Colleen O'Neil, Communications Specialist
Mountain Watershed Association
Pennsylvania

Tamela Trussell, Move Past Plastic (MPP)
Founder MS Ed.
Move Past Plastic (MPP)
Pennsylvania

Jay Notartomaso, Founder
NEPA Green Coalition
Pennsylvania

Karen Elias, Ph.D.
No False Solutions PA
Pennsylvania

Edith Abeyta,
North Braddock Residents For Our Future
Pennsylvania

Chris Rabb, State Representative
Pennsylvania General Assembly
Pennsylvania

Alan Peterson, MD, Emeritus Director of
Community and Environmental Medicine
PSR
Pennsylvania

Glenn Olcerst, General Counsel
Rail Pollution Protection Pittsburgh (RP3)
Pennsylvania

Barbara Jarmoska, Director
Responsible Decarbonization Alliance
Pennsylvania

Sandy Field, PhD
Save our Susquehanna
Pennsylvania

Douglas Mason,
Sierra Club Moshannon Group
Pennsylvania

Jennifer Michel, President
**The Citizen's Environmental Association of the
Slippery Rock Area**
Pennsylvania

Heather Hulton VanTassel, Executive Director
Three Rivers Waterkeeper
Pennsylvania

Nora Privitera, Attorney at Law
350 Bay Area Action
California

Annie Stuart, Steering committee member
350 Petaluma
California

Eileen Haflich , 350Petaluma
350 Petaluma
California

Thelisa Lavergne, Climate Justice Program
Manager
Air Alliance Houston
Texas

Jonathan Rosen, Industrial Hygiene Consultant,
MS CIH FAIHA
AJ Rosen & Associates LLC
New York

Pamela K. Miller, Executive Director
Alaska Community Action on Toxics
Alaska

Ashlyn Johnson, Civic Engagement Coordinator
Alaska Community Action on Toxics
Alaska

Katie Huffling, DNP, RN, CNM, FAAN, Executive
Director
Alliance of Nurses for Healthy Environments
Maryland

Linda Reinstein, President
**Asbestos Disease Awareness Organization
(ADAO)**
California

Jessica Mitchell, Education and Engagement
Program Manager
Berkeley Ecology Center
California

Andrew Hinz,
Beyond Extreme Energy, #CoalFreeCurtisBay
Maryland

Judith Enck, former EPA Regional Administrator,
President
Beyond Plastics
Vermont

Edna Litten,
Beyond Plastics Altamont
New York

Eileen Ryan, Leader
Beyond Plastics Greater Boston
Massachusetts

Jane Dow, Mankato Zero Waste and Beyond
Plastics Greater Mankato Area
Beyond Plastics Greater Mankato Area
Minnesota

Liz Peltekian,
Beyond Plastics MO/WI
Wisconsin

Victoria Augustine, Member
Beyond Plastics Queens
New York

Rebekah Creshkoff, Communications Officer
Beyond Plastics Sullivan County NY
New York

Luz Rooney, Co-Founder
BeyondPlasticsMOWI
Missouri

DA Allen, EX. DIR.
Blue Dolphin
California

Brett Nadrich, US & Canada Communications
Officer
Break Free From Plastic
New York

Lisette van Vliet, Senior Policy Manager
Breast Cancer Prevention Partners
California

DONALD P. BROWN, SR., Research Scientist
**Brown Energy & Environmental Consulting and
Development, LLC**
New Hampshire

Debby Lee Cohen, Co-Executive Director and
Founder
Cafeteria Culture
New York

Miyoko Sakashita, Oceans Program Director
Center for Biological Diversity
California

Thomas Fox, Senior Legislative Counsel
Center for Environmental Health
Virginia

Stephen Lester, MS, Toxicology
Center for Health, Environment & Justice
Virginia

Ka'sha Bernard, Legal Organizer
Center for International Environmental Law
District of Columbia

George Thompson, Ph.D.
Chemical Compliance Systems, Inc.
New Jersey

Barbara Weckesser
Cherokee Concerned Citizens
Mississippi

Deb Katz, Executive Director
Citizens Awareness Network
Massachusetts

Georgina Shanley, Co Founder
Citizens United for Renewable Energy (CURE)
New Jersey

Lynn Thorp, National Campaigns Director
Clean Water Action
District of Columbia

Gwendolyn Jones, Director
Climate Conversation Brazoria County
Texas

Kent McGill, MA, Sociology
Climate Crisis Working Group
North Carolina

Laurie O'Loughlin, Leader
Climate Crisis Working Group of Moore County
North Carolina

Phil Matson, Research Coordinator
Coalition For A Clean CFAC
Montana

Margaret Shield, Ph.D.
Community Environmental Health Strategies
Washington

PAUL. GEARY , MR.
Concern Citizen Table of Lake Charles
Louisiana

Joni Arends, Executive Director
Concerned Citizens for Nuclear Safety
New Mexico

Sarah Woodbury, Vice President of Programs
and Policy
Defend Our Health
Maine

Louis Curran, Esq., Member
Democrats Anroad, and Veterans For Peace
Maryland

Mary Gutierrez , B.S., M.P.A.
Earth Ethics, Inc.
Florida

Daniel Savery, Senior Legislative Representative
Earthjustice
District of Columbia

Frank Bove, Board President
ECO-Action
Georgia

Martin Bourque, M.A.
Ecology Center
California

Michael Garfield, Executive Director
Ecology Center
Michigan

Nancy Alderman, President, MES
Environment and Human Health, Inc. (EHHI)
Connecticut

Eric Schaeffer, Director
Environmental Integrity Project
District of Columbia

David M. Newman, Industrial Hygienist,
Environmental & Occupational Health & Safety
EOHS Associates LLC
New York

Yolanda Whyte , MD
Ethical And Respectful Treatment of Humans
Georgia

John Peck, Executive Director
Family Farm Defenders
Wisconsin

Yvette Arellano, Founder & Director
Fenceline Watch
Texas

James Hiatt, Director
For a Better Bayou
Louisiana

Elaine Tanner , Friends For EJ Program Director
Friends For Environmental Justice
Kentucky

Paloma Henrques, Senior Petrochemical
Campaigner
Friends of the Earth
Washington

Rachael Thompson, Executive Director
Glynn Environmental Coalition
Georgia

Luan Le, Development & Communications
Director
GMO/Toxin Free USA
Connecticut

Lesley Pacey, Environmental Investigator
Government Accountability Project
Alabama

Patti Wood, Executive Director
Grassroots Environmental Education
New York

Todd Larsen, Executive Co-Director
Green America
District of Columbia

Bradley Angel, Executive Director
Greenaction for Health and Environmental Justice
California

Charlie Cray, Senior Research Specialist
Greenpeace USA
District of Columbia

Alyssa Portaro, Founder/Director
Habitat Recovery Project
Louisiana

Deborah Jackson, Admin. Asst.
Harambee House
Georgia

April Peebler, Exec Dir
Heirs To Our Ocean
California

Kayla Peng, Youth Advisory Council Member
Heirs to Our Oceans
New Jersey

Russell Armstrong, Senior Director Campaigns and Advocacy
Hip Hop Caucus
District of Columbia

Audrey Cole, President
Housatonic Environmental Action League (HEAL)
Connecticut

Tim Gray, Executive Director
Housatonic River Initiative (HRI)
Massachusetts

Basav Sen, Climate Policy Director
Institute for Policy Studies Climate Policy Program
District of Columbia

Kirstie Pecci, Executive Director
Just Zero
Massachusetts

Eunju Kang, Operation Coordinator
KACC
California

Penny Logsdon, Lee County Labor Chapter AFL/CIO President
Lee County Labor Chapter AFL/CIO
Iowa

Ranjana Bhandari, Executive Director
Liveable Arlington
Texas

Richard Moore, Co-Coordinator
Los Jardines Institute
New Mexico

Harold "Hank" Bagwell, Film Producer
Lost Pirate Pictures
Florida

Karen Forget, Executive Director
LRNow in Virginia Beach
Virginia

Darryl Malek-Wiley, CEO
M-W & Associates
Louisiana

Eric Engle, Board President
Mid-Ohio Valley Climate Action
West Virginia

Beverly Mack-Martin , MPA
Midwest Minority Energy Consortium
Indiana

Dana Ripper, MS
Missouri River Bird Observatory
Missouri

Kathleen A. Curtis, LPN
Moms for a Nontoxic New York (MNNY)
New York

Debra Sullivan Ramirez, President/Founder
Mossville Environmental Action Now
Louisiana

Cynthia Munley, Treasurer
Mothers Out Front Roanoke
Virginia

Sarah Ryan, MPH
MSKCC
New York

Cheryl Auger, Owner
My Zero Waste Store
California

Angel DeFazio, BSAT, BCNHP, President
National Toxic Encephalopathy Foundation
Nevada

Ann Podlipny,
NHNetwork
New Hampshire

Carol Gay, President
NJ State Industrial Union Council
New Jersey

Jerry Rivers, Environmental Scientist
North American Climate, Conservation and Environment(NACCE)
New York

Mark T. Lundholm, Environmental Scientist
NWSOFA-Indivisible
Illinois

Dave Henson, Executive Director
Occidental Arts and Ecology Center
California

Hannah Fine, Senior Director of Campaigns
Only One
New York

Kristen McDonald, Plastics Lead
Pacific Environment
California

Tonya Shuler, Group leader
Paden City water crisis group
West Virginia

Lisa Davis, Paden City Water Crisis group
Paden City Water Crisis team
West Virginia

Stiv Wilson, Co Director
Peak Plastic Foundation
Washington

Mary Finneran, board member
People for a Healthy Environment
New York

Dianna Cohen, CEO
Plastic Pollution Coalition
California

Gabrielle de Gail, Sustainability Coordinator
Plastic-Free MKE
Wisconsin

John Beard, CEO
Port Arthur Community Action Network(PACAN)
Texas

Savannah Robledo, BFFP Pledge Manager
Post-Landfill Action Network (PLAN)
New Hampshire

Maury Johnson, BOD Member
Preserve Monroe
West Virginia

Jeffrey Lamont, MS Watershed Science
President Save Our Water (SOH2O)
Wisconsin

Elizabeth O'Nan, BFA
Protect All Children's Environment
North Carolina

Anthony Tweedale, MS
R.I.S.K. Consultancy
Michigan

Joseph Mangano, MPH MBA
Radiation and Public Health Project
New Jersey

Beto Lugo Martinez
Rise4EnvironmentalJustice
Missouri

Sarah Doll, National Director
Safer States
Oregon

Diane Wilson, Executive Director
San Antonio Bay Estuarine Waterkeeper
Texas

Eric Magers , ED
Seaside Sustainably
Massachusetts

Star Hesse, Member
Senior Legislative Action Committee of Sullivan County
New York

Stephanie Blumenthal, Head
Sheffield Saves
Massachusetts

Abigail Martin, Research Fellow
Stanford Doerr School of Sustainability
California

Jennifer Savage, Senior Manager, Plastic Pollution Initiative
Surfrider Foundation
California

Kevin Greene, Zero Waste Chair
Sustainable Tucson
Arizona

Robin Schneider, Executive Director
Texas Campaign for the Environment
Texas

Juan Parras, Director
Texas Environmental Justice Advocacy Services
Texas

Jackie Medcalf, Executive Director
Texas Health & Environment Alliance
Texas

Alison Waliszewski, Director of Policy and Programs
The 5 Gyres Institute
California

Clarence Williams, M.S.
The Chapel Hill Organization
Georgia

Jo Banner, Director
The Descendants Project
Louisiana

Jan Dell, Independent Engineer
The Last Beach Cleanup
California

Jackie Nuñez, Founder
The Last Plastic Straw
California

Beka Economopoulos, Executive Director
The Natural History Museum
Washington

Emy Rodriguez Rancier, US Manager
The Plastic Solutions Fund
New Jersey

Sam Pearse, Campaigns Director
The Story of Stuff Project
California

Maya Lilly, Producer
The YEARS Project
New York

Joel Bach, Executive Director
The YEARS Project
New York

Nicole Fabricant, PhD
Towson University
Maryland

Mike Schade, Director, Mind the Store
Toxic-Free Future
New York

Marylia Kelley, Senior Advisor
**Tri-Valley CAREs (Communities Against a
Radioactive Environment)**
California

Joanie Steinhaus, Ocean Program Director
Turtle Island Restoration Network
Texas

Janice Gintzler, Masters of Linquistics and
Russian Language
United Women in Faith
Illinois

Scott Smith, CEO
US BioSolutions LLC
Massachusetts

Roishetta Ozane, Founder/CEO
Vessel Project of Louisiana
Louisiana

Rachel Davis, MS, Economics
Waterspirit
New Jersey

Anne Hart,
We Are One Sullivan
New York

Autumn Crowe, Deputy Director
West Virginia Rivers Coalition
West Virginia

Marianne Edain, Ms
Whidbey Environmental Action Network
Washington

Alice Slater, JD
World Beyond War
New York

INDIVIDUALS (affiliations for identification
purposes only)



cty



CC: Brenda Mallory, Chair, White House
Council on Environmental Quality
U.S. Senator Sherrod Brown
U.S. Senator J.D. Vance
U.S. Senator Bob Casey
U.S. Senator John Fetterman

EXHIBIT 31

February 20, 2024

East Palestine Let Down by Biden's Visit

Many residents are claiming the President's visit was just a show, calling it too little too late.

EAST PALESTINE – On Friday, February 16, 2024, President Biden visited a neighboring town in Pennsylvania to meet with individuals from East Palestine, Ohio. In the long-awaited visit, Biden met with residents, Mayor Trent Conway, Environmental Protection Agency, and Federal Emergency Management Agency to discuss the derailment and the cleanup efforts conducted by the agencies. In his press conference that afternoon, he said “Norfolk Southern failed” the small village. However, the President did not address the health concerns being experienced by the residents, the levels of dioxins and other dangerous chemicals, or mentioned anything about declaring a national disaster for the incident.

Furthermore, we provided the White House with a 52-page [briefing](#) packet on East Palestine before the President's visit to the Ohio town. The packet detailed the unfolding medical nightmare among residents as well as statements from toxicologists concerned about the health impacts as well the EPA's reliance on environmental monitoring by Norfolk Southern contractors. We implored the President to meet with residents who are sick and critical of the EPA's response. We also provided recommendations including a disaster declaration, medical care and monitoring for residents and holding EPA accountable.

Whistleblower client and independent scientist, Scott Smith, stated:

“My heart goes out to the residents of East Palestine that were silenced on Friday and whose voices were not heard and cannot get the help they need. Don't be fooled by the disingenuous tough talk for the cameras about 'holding Norfolk Southern accountable,' after watching the EPA on Friday, there is no doubt that the EPA is the public relations arm of Norfolk Southern as they obfuscate testing to fit the Norfolk Southern false narrative.”

Our Legal Director, Tom Devine, commented:

“The President said there's a lot left to do. He's right. But his speech skipped what's needed. First, he needs to hold the EPA accountable, not just the railroad. The EPA chief he praised has betrayed the public trust and is now declaring victory. Second, he must retract the government's reassurances that the town is safe. Residents' grotesque medical nightmares belie that claim. Third, he needs to order credible, independent sampling. The EPA's data comes from an honor system by a Norfolk Southern contractor with a long history of not finding public health threats despite clear evidence to the contrary. Most basic, he needs to hear the whole truth. The White House cherry-picked the residents who met with the President. The visit will

not include the voices of residents leading the attacks on EPA's disinformation that the town is safe and called the bluff on rigged EPA sampling."

Contact: Mary Allain, Interim Communications Director

Email: marya@whistleblower.org

Phone: (202) 926-3304

Government Accountability Project

Government Accountability Project is the nation's leading whistleblower protection organization. Through litigating whistleblower cases, publicizing concerns and developing legal reforms, Government Accountability Project's mission is to protect the public interest by promoting government and corporate accountability. Founded in 1977, Government Accountability Project is a nonprofit, nonpartisan advocacy organization based in Washington, D.C.

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EXHIBIT 32

MotherJones

ENVIRONMENT FEBRUARY 25, 2024

One Year Later, East Palestine Residents Are Still Having Symptoms

"We haven't really gotten any answers."

KILEY BENSE



Wreckage of a Norfolk Southern freight train that derailed last February in East Palestine, Ohio, dispersing toxic chemicals far and wide. **Gene J. Puskar / AP**

This story was originally published by Inside Climate News and is reproduced here as part of the Climate Desk collaboration.

On March 20, 2023, Hilary Flint uploaded a new video to her TikTok account. The clip starts with a close-up of her face, her cheeks flushed and her gaze trained on the camera. The post is tagged #eastpalestine. "I live in Enon Valley, Pennsylvania," she says. "Less than five miles from the Norfolk Southern train derailment."

"Since the train derailment, my skin has been red like a lobster, especially any time after I shower. I've been breaking out, I'm incredibly congested, and I have psoriasis, but now it's so bad that it bleeds," she says, pressing one finger to her pink face, leaving a white impression behind. "So when they tell me that everything is safe here, that's really hard to believe."

A year after the derailment in East Palestine, Ohio, and seven months after her first post about her symptoms, Flint is still sharing videos tagged with #eastpalestine, and she is still experiencing health effects that she says began at the time of the accident.

On February 3, 2023, 38 train cars derailed in East Palestine, just a few hundred yards from the Pennsylvania border. Twenty of the cars contained hazardous chemicals like vinyl chloride, ethylhexyl acrylate and butyl acrylate. Vinyl chloride is a known human carcinogen, and exposure can also cause fatigue and dizziness as well as irritation to eyes, mucous membranes and the respiratory tract.

Some of the cars' contents caught on fire, others spilled into nearby streams, and on February 6, the owner of the railway, Norfolk Southern, conducted a controlled burn of the cars that were originally carrying 115,000 gallons of vinyl chloride.

In an interview in January, Flint said she has rented a house in western New York in order to limit her time at her home in Pennsylvania. But whenever she returns, her symptoms do, too. "Within three days I'll start to get nosebleeds, constant congestion, sinus issues, pretty much all the same problems that we've had for the past year," she said. "They all resurface within about three days in my home."

"People were saying, 'Oh, but it's mostly women, so it must be all in their heads.' But women are more chemically vulnerable than men for a number of reasons."

Flint is not alone: Other Pennsylvanians living near the accident site say they are suffering from alarming symptoms like hair loss, tremors and migraines. They fear for the long-term health of themselves and their families, and they wonder if their properties' water, soil and air are truly safe. Many of those affected are women and children, groups who tend to be more vulnerable to chemical exposure. Because they live outside the one by two-mile radius set by the Environmental Protection Agency as a protective zone around the fire, they have often been stymied in their efforts to access resources like testing, medical guidance and funds for cleanup and relocation meant for victims of the accident.

In their quest for answers, residents like Flint have spent months contacting a laundry list of government officials and agencies, from

state lawmakers and the governor's office to the Environmental Protection Agency and the Pennsylvania Departments of Environmental Protection and Health.

"When you call, they ask for your address. And if it is outside of that one-by-two-mile radius, they go, 'OK, sorry, I can't help you.' And that's it," Flint said, of calling EPA and DEP not long after the derailment. "Even though I understood they weren't testing in the area, there was just no guidance at all."

Carly Tunno, a resident of Beaver County, said she's been directed from one department to the next in her attempts to find testing and gain a better understanding of the symptoms that she and her children have been dealing with since the derailment last year. "You just get the runaround, and then they give you another number to call and you never get anywhere. They take a message, say somebody will call you back. It's very frustrating," Tunno said. "We haven't really gotten any answers; there's not really any urgency or concern."

In a statement about the governor's response to the accident over the past year, Shapiro's press secretary Manuel Bonder said that "Gov. Shapiro has been focused on delivering the support and resources Western Pennsylvania needs, protecting the health and safety of our communities, and holding Norfolk Southern accountable for the impacts of their derailment" from "the very beginning of Pennsylvania's response to the Norfolk Southern train derailment in East Palestine."

Bonder said that the governor had "directed the Pennsylvania Department of Environmental Protection to conduct independent water and soil testing in close proximity to the derailment site and post the results online for residents to see for themselves, already delivered more than \$1.4 million for first responders to recoup equipment losses from responding to the derailment, and ensured Pennsylvanians were not picking up the tab for the derailment."

"More than one year after Norfolk Southern's train derailment, the Shapiro Administration continues to work with local communities in Beaver and Lawrence counties to ensure Pennsylvanians are safe and deliver resources those communities need to recover," he said. "The administration will continue that work for as long as it is necessary."

A press release from the governor's office from February 2 outlining the response to the derailment listed a train derailment dashboard created to connect residents with resources, a health resource network and continued testing by DEP and the Department of Agriculture, which has not found "any long-term contamination" in western Pennsylvania.

Pennsylvania's DEP and Department of Health say it is "extremely unlikely" that anyone farther than two miles from the accident site was "exposed to chemicals or particles of concern."

"Due to the relatively short duration exposure from this incident, health effects consistent with long-term exposure are not expected to occur," the two agencies wrote in a Frequently Asked Questions document about the derailment. In February, DEP published an interim report on the past year of testing in western Pennsylvania that found "no evidence of contamination in Pennsylvania's private water wells, surface water, and soil" related to the derailment.

In a statement provided for this article, an EPA spokesperson said that "no lingering volatile organic compounds would be present in Pennsylvania based on our monitoring, sampling, and scientific understanding of these chemicals."

But a University of Kentucky health tracking study found that 64 percent of adults and 63 percent of children in the area around the site had experienced a new upper respiratory symptom since the derailment. Survey respondents included residents living in Ohio and Pennsylvania, both close to the site and more than 10 miles away. Other symptoms included rashes, sore throat, nausea, eye irritation, headache, cough, lethargy, and shortness of breath.

"We were just told you can't possibly be affected because you're too far away," said Flint, who lives less than five miles from the derailment site.

Erin Haynes, director of the University of Kentucky Center for the Environment and the leader of the study, said it was significant that 80 percent of those reporting an upper respiratory symptom lived within one mile of the accident and that the number decreased as you moved away from the site. "That's what I would expect, but then, just to see it was like, ah, it's there," she said. "[People] are not lying. They're telling the truth." In the fall, half of respondents who reported symptoms said they were still experiencing them.

Some people living near the site are doing fine, Haynes said, and not everyone is worried about contamination in their homes or on their land. But based on the information provided by residents who have participated in her study so far, she believes there is a need to gather

more data. "Not everyone is experiencing a health effect, but there are some who are, and we need to take that very seriously," she said.

"Assuming that there's some tight, confined area within which problems occurred is not very realistic," said Beatrice Golomb, professor of medicine at University of California San Diego and the principal investigator for an ongoing public health study on the impacts of the derailment on people living in East Palestine and the surrounding areas, including Beaver County.

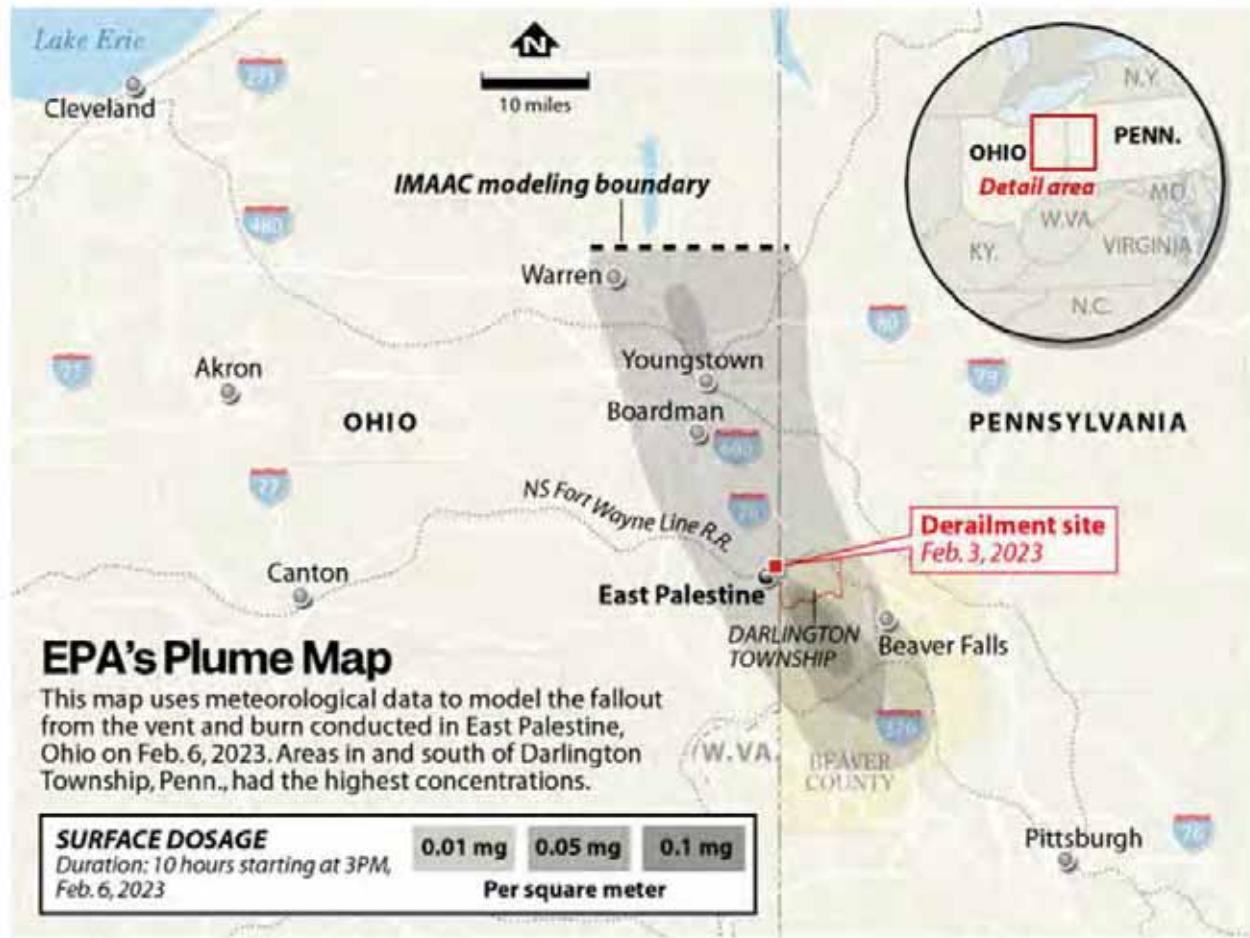
"We've heard from people all the way up into Canada, initially reporting seeing the same strange coloring in their water, and animals sickening," she said. "The idea that, gee, just at the same time, similar things have been reported that far, with a pathway that was consistent with wind directions—for that to be unrelated would seem pretty unlikely. That there'd be no possibility that those chemicals can produce health effects is also just not a sensible inference to draw."

Golomb said that the number of women who are experiencing symptoms has contributed to skepticism about long-term health effects' relationship to the derailment. "We had heard from the East Palestine community that people were saying, 'Oh, but it's mostly women, so it must be all in their heads,'" she said. "But women are more chemically vulnerable than men for a number of reasons," and children are, too.

Residents point to the Environmental Protection Agency's plume map of the soot released by the vent and burn, which shows the highest concentration of surface deposition in Beaver County on the Pennsylvania side of the border. Using meteorological data, the map models how soot released by six hours of burning traveled and then fell to the ground over time.

"We were just told you can't possibly be affected because you're too far away," said Flint, who lives less than five miles from the site of the derailment and fire. "And it wasn't until many months later that the plume map came out, and there you see the evidence that this

plume went directly over all these PA communities. Yet none of those communities had access to help, especially early on."



SOURCES: Interagency Modeling and Atmospheric Assessment Center (IMAAC); EPA; ESRI

PAUL HORN / Inside Climate News

Paul Horn / Inside Climate News

Unlike the circle of the official one-by-two-mile protective radius, the plume map depicts an oblong, irregular shape of potential contamination extending southeast into Pennsylvania. The EPA spokesperson said that early air monitoring confirmed "the presence of low levels of hydrogen chloride (below the health-based action level) and particulate matter" after the vent and burn, but that these contaminants "were no longer present after a few days." Soil testing conducted after the burn on land affected by the smoke plume "indicated no additional risks to these areas."

"I think it's really important that regulatory agencies not look at this as black and white but rather look at this as a level of risk," said Heather Hulton VanTassel, the executive director at Three Rivers Waterkeeper, a regional water quality and watershed health organization that has carried out recent testing on water and soil in the area. "We cannot argue that that community is at the same risk of exposure to these harmful contaminants as they were prior to the derailment. That's false."

Hulton VanTassel said that exposure levels differ based on air and water flows, and that some populations, like those with chronic illnesses, were more vulnerable to harm from the contaminants released by the derailment. People living near the derailment are going to have an increased risk, she said. "That does not mean every person who is exposed is going to get sick. It's just that there's an increased risk."

For Hilary Flint, who is a cancer survivor, the seriousness of the derailment became tangible when she returned to her home for the first time after self-evacuating during the vent and burn. "All it took was opening the door to our house. The smell was so strong, it just immediately enveloped you," she said. Flint said that within an hour of being home, she began to experience headaches, eye

irritation and rashes, and that some of these symptoms—and the strange “sweet bleach” odor clinging to the rugs, fabric and furniture in her house—still linger, even now.

Hulton VanTassel said that Flint’s symptoms and experience of feeling sicker when she is at home are consistent with exposure to the kinds of chemicals released by the vent and burn. “That’s a pretty cause and effect relationship there, when that didn’t happen prior to the derailment,” she said. “Those are the types of symptoms that would occur with the contamination that we found in the sediment.”

Golomb said that participants in her study have reported similar experiences to Flint’s, of leaving town only to be sickened again when they returned. And there are other stories of potentially contaminated furniture and clothing. “We’ve had people who felt sick move to a relative’s house, and the relative opens the suitcase and throws up,” she said.

Flint started her search for testing by calling a phone number for the Norfolk Southern assistance center listed on television during a press conference. The number was wrong. When she eventually got the right number, she was dismissed as soon as she gave her address. The EPA and Pennsylvania DEP responded similarly, she said.

In May, after weeks of trying to reach state officials and legislators, Flint heard that the Shapiro administration would be hosting a small business resource fair in Darlington Township, close to where she lives, focused on economic recovery from the derailment. Flint suspected that the governor might be there, and she was determined to speak to him. She worked in her car in the parking lot until she saw Shapiro, and she and another resident approached him.

“We explained to him where we’re from, what we’re experiencing, how we’re not getting any help,” she said. “He was really receptive. He said, ‘I have gotten Pennsylvania residents money, and you just have to fill out this form.’” She said that someone from DEP then gave her a paper titled Business Loss Claims Information Sheet.

“I immediately read it, and I say, ‘Are you sure that this is right?’” Flint remembered. “Shapiro was assuring me, yes, and he was also with the DEP Secretary at the time, Richard Negrin. They were both telling us yes, this is the form, you just have to fill it out. That’s all you have to do.”

After she met Shapiro at the fair, Flint posted another video to her TikTok account. Sitting in her car, Flint holds up the paper from DEP. She says she questioned Shapiro when he handed it to her, asking how residents were supposed to know that this business-related form applied to them. “I will say, he was very kind,” she says. “I really do believe Governor Shapiro is an ally. But I hope he understands that this is not intuitive to anyone. No one knew this existed.”

Later, when Flint called the phone number on the form, she was told that she was not eligible to receive assistance this way.

The DEP form was a dead end, but during Flint’s brief meeting with the governor, she got a business card from Patrick Joyal, Southwest Region director for the governor’s office. Joyal put her in touch with a representative for Norfolk Southern, and in August, after seven months of persistence, she received some financial assistance from the company for the hotel bills she accumulated while trying to stay away from her Enon Valley home. The check did not cover all of her travel expenses.

Flint’s home has since been tested by Wayne State University, which she says detected vinyl chloride and ethylhexyl acrylate on her property. She is working a second job to pay for the rent on the house in New York, but she feels she has no choice. She still can’t get the smell out of her home despite many attempts to clean it. “The minute that laundry linen scent comes off, the sweet bleach scent is back,” she said.

Flint’s long battle for access to assistance is testament to the difficulties residents have faced over the past year navigating the tangle of federal, local and state government agencies, departments and offices that are responsible for the response to the derailment.

“We already have people that

Tunno lives in Beaver County, seven and a half miles from the derailment site. When the vent and burn began, “the sky was so dark,” she said. “You could see the clouds roll in.” Her family was not told to evacuate, and they did not leave. “It was hard to breathe,” she said. “My

are fully meeting the symptom criteria for so-called Gulf War illness, which is a chronic multi-symptom health problem.”

Tunno said that her hair has been falling out since March, and she's still beset by a sense of fatigue that wasn't there before the derailment. Doctors were unable to explain her hair loss, telling her to wait four to six months to see if it grows back. She said she didn't “jump to the conclusion right away” that her symptoms could be connected to the vent and burn, but when preliminary tests came back normal, she wondered.

“If you were losing your hair, you would want to know why,” said Tunno, who is 35 and works as a bartender and waitress not far from her home. Her extended family also lives nearby. “This was new for me. I'm generally healthy. I don't really get sick that often,” she said. After she posted photos online of her hair loss, she said she'd heard from three other women in the area whose hair was falling out, too.

Tunno is also concerned for her three small children. “My children have been sick more in the past year and missed more school than they ever have,” she said. She is afraid there could be long-term consequences for their health and doesn't know how she'll afford to pay for medical care if they need it.

Tunno said her attempts to communicate with EPA, DEP, the Department of Health and local healthcare providers have yielded little clarity so far, and she is wary of signing up for university-led studies that publish results but may not hold anyone accountable for what they find. “I don't feel like that should be the only option,” she said.

Christina Siceloff, who lives about five miles from the derailment site, in Darlington Township, still remembers the panic of the day of the vent and burn. “I was running all over the house,” she said, calling family and looking up hotels, trying to figure out where she, her son and her father could go if they needed to leave. “Finally, like 15 minutes before they did the release, I said to my dad, well, I don't know where to go,” she said. “So I guess we're just going to stay here and see if we die.”

After the vent and burn started, Siceloff went outside and walked up the hill from her house. “You could see this cloud across the sky,” she said, “and it would get closer and closer.” Within an hour, she said, her eyes were watering, her nose burned and she had a migraine and a cough, symptoms she said lasted for five months or more. The migraines persist, and she's now taking allergy medication and on two inhalers. She was diagnosed with a fine tremor in December.

“All of that is new since the derailment happened,” she said. Siceloff twice visited a health clinic set up in Darlington by the governor's office and the Pennsylvania Department of Health but found few answers there. She was told to visit her primary care doctor, who said she had an upper respiratory infection. “They diagnosed me with exposure to toxins that were non-occupational,” she said.

Siceloff contacted EPA, DEP and Norfolk Southern asking for testing of her soil and water and was turned away every time because she lives too far outside the radius. She was eventually able to get testing done by Purdue University, which did not detect contaminants in the well water but did find evidence of dioxins in the soil. She worries that her water could still be contaminated because the test sample came only from the top of the cistern. She would like to have more extensive testing of her water and better answers to her medical questions about what it means to be exposed to multiple chemicals at one time.

“Many of the symptoms that we're hearing now, we saw before,” said Golomb, who previously studied Gulf War illness, a set of symptoms affecting veterans of the Gulf War that is linked to chemical exposure and especially to multi-chemical exposure. “We already have people that are fully meeting the symptom criteria for so-called Gulf War illness, which is a chronic multi-symptom health problem,” she said.

Migraines, fatigue, asthma and respiratory issues, as well as dermatological problems like rashes and hair loss, are all consistent with reactions to multi-chemical exposure, Golomb said. "People are sick," Siceloff said. "And some people seem to be getting sicker."

Misti Allison, an East Palestine resident who has become a community and public health advocate in the wake of the derailment, said that "healthcare monitoring is an unmet need" in both Ohio and Pennsylvania. "I want to have some type of framework in place so that the medical providers in the area know what they should test for and the questions that they should be asking," she said. "Because in the very beginning, a community health needs assessment was not done. There has not been a database that has been created."

A database could be used to monitor long-term health impacts of the derailment on the population, Allison said, and keep track of residents, like Siceloff, who have developed new chronic conditions since the vent and burn. Allison also believes that medical care should be covered for people whose health has suffered because of environmental exposure.

"At any given moment up to 36 million pounds of toxic vinyl chloride are being shipped via rail by America's largest producer."

"I don't feel like anybody is looking for a handout," Allison said. "I know there's some people that will say that we are trying to take advantage of a bad situation. I don't feel that way. I feel like the overall sentiment in town is that people are just scared."

Although Darlington Township is a rural area with fewer than 2,000 residents, the rail lines carrying vinyl chloride and other hazardous chemicals extend across Pennsylvania, through much more densely populated parts of the state. The same train tracks also run west and then south, through Ohio, Indiana, Illinois, Missouri, Arkansas and Texas, according to a new report from Toxic Free Future, an

environmental health research and advocacy organization.

"At any given moment up to 36 million pounds of toxic vinyl chloride are being shipped via rail by America's largest producer, OxyVinyls," the report explains. In Pennsylvania, Ohio and West Virginia, more than 14 million people live within one mile of an active rail line, recent research from FracTracker shows. An East Palestine-like derailment in a more urban area could be catastrophic.

After the derailment, Flint co-founded a community grassroots group, the Unity Council for the East Palestine Train Derailment, that has advocated for the needs of impacted residents in Ohio and Pennsylvania and to improve the systems currently in place to respond to environmental disasters like East Palestine.

But she still feels that some Pennsylvanians are being left behind. "It's not the majority of the community or every single person, but it's a lot of women and children and people with preexisting health conditions, because we are more susceptible to certain chemicals and chemical exposure," Flint said. "Just because we're not the majority, it doesn't mean that our needs don't matter."

"The impact on people's lives has really been the most heart-wrenching part of this," Golomb said. "The stress and worry about, what does this mean? What will happen? Do we need to move?"

Most people cannot afford to leave their homes, no matter how sick they feel there, and the lack of aid from the government has led to a "loss of faith in their country's institutions," Golomb said. Even if they do manage to leave, they still face difficulties in finding work and the grief of saying goodbye to their homes, belongings and extended families. "They're really feeling left behind and forgotten by the government," she said.

When Darlington Township received \$660,000 from Norfolk Southern for "community relief" in July, the money was deposited into a high-yield savings account for first responders and future emergencies. "I want everyone to have access to resources, but what about the people?" Flint asked. She wanted to know: where was the assistance for people who are not farmers, small business owners or firefighters?

"We're sitting here poisoned in our homes, and no one's helping us, and everyone's just pointing the finger at the other person," she

said. "It's been a year now. This has been happening for too long."



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EXHIBIT 33

March 6, 2024

FOIA Request Regarding Environmental Protection Agency's Environmental Sampling Protocols Filed following the East Palestine Train Derailment

WASHINGTON — Today, we announced the filing of a Freedom of Information Act (FOIA) request aimed at obtaining crucial information regarding the Environmental Protection Agency's (EPA) response to the East Palestine Train Derailment (EPTD).

The FOIA [request](#) seeks access to records and communications concerning the methodologies employed by the EPA in testing and sampling air, water, soil, and groundwater in the aftermath of the EPTD, which occurred from February 3, 2023, through February 3, 2024.

Specifically, the request includes a demand for documents such as field sampling protocols, correspondence, memoranda, emails, reports, assessments, and studies related to the testing and sampling methodologies. Additionally, we are seeking quantitative criteria used by the EPA to determine the need for additional sampling or the presence of significant hazards or risks, as well as information on indicator compounds used to detect the likely formation of dioxins and furans.

Lesley Pacey, our Environmental Investigator, emphasized the importance of this FOIA request, stating,

"Our aim is to gain a comprehensive understanding of the strategies employed by the EPA and its contractors in assessing the environmental impacts of the East Palestine Train Derailment. We are particularly interested in the reasoning behind the decisions made regarding sampling methodologies and the potential implications for public health and environmental safety."

Contact: Mary Allain, Interim Communications Director

Email: marya@whistleblower.org

Phone: (202) 926-3304

Government Accountability Project

Government Accountability Project is the nation's leading whistleblower protection organization. Through litigating whistleblower cases, publicizing concerns and developing legal reforms, Government Accountability Project's mission is to protect the public interest by promoting government and corporate accountability. Founded in 1977, Government Accountability Project is a nonprofit, nonpartisan advocacy organization based in Washington, D.C.

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EXHIBIT 34

March 7, 2024

NTSB Testimony Proves Lack of Communication and Concern for East Palestine Officials and Residents

WASHINGTON – On February 6, 2023, following the derailment of several train cars carrying chemicals, the Environmental Protection Agency (EPA) issued a notice to detonate the chemicals in the trains, out of fear that there would be an explosion. Yesterday, in a Congressional hearing, the National Transportation Safety Board chair, Jennifer Homendy, testified the site did not need to be burned and there were safer options. The fire chief of East Palestine and other local officials were given incomplete information to approve the decision of the controlled explosion in 13 minutes with no other options offered. What they were not told was that the train cars were cooling in temperature and held no threat of a larger explosion. The EPA appears to have violated its own statutes when it allowed the open burn.

Chairperson Homendy's testimony showed the breakdown in communication between Norfolk Southern, the state of Ohio, the incident commander and other members of Unified Command including the EPA concerning the decision to commence the vent and burn of vinyl chloride and other toxic chemicals. This was just the beginning of the lies, misinformation, and lack of transparency with not only the local officials, but also the residents.

The U.S. government needs to hold the EPA, Norfolk Southern, its contractors, and other key players accountable through Congressional hearings and increased oversight in their decision to knowingly allow toxic chemicals including dioxin, phosgene, benzene and more than 100 toxic chemicals to be released into the village and surrounding communities.

Environmental Investigator, Lesley Pacey, commented:

"Yesterday's hearing confirmed our worst fears: Norfolk Southern and its contractors knew that the vinyl chloride train cars were not in danger of exploding but they deliberately failed to convey this crucial information to decision-makers at the state and local level. As the On Scene Commander of this disaster, the EPA should have prevented this detonation from happening. Instead, the EPA acquiesced to the railroad on this decision and has been doing so ever since as it has allowed railroad contractors to provide nearly all the testing to assure residents their environment is safe. Nothing could be further from the truth. The resulting chemical bomb created an unprecedented dioxin event that exposed East Palestine and surrounding communities to multiple chemical mixtures resulting in a litany of health issues. Now that we know that the decision to vent and burn was based on lies, the EPA, Norfolk Southern and its contractors must be held accountable."

Contact: Mary Allain, Interim Communications Director

Email: marya@whistleblower.org

Phone: (202) 926-3304

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EXHIBIT 35



March 29, 2024

Open Letter to Norfolk Southern

Hello,

The Unity Council for the East Palestine, OH Train Derailment is requesting a meeting with Alan Shaw. We understand he is in East Palestine frequently, but he does not get to meet with a group that is representative of the entire community. The voices of those most educated on the issues and the voices of those with human health concerns are blocked by our local government. As the boots on the ground, we would like the opportunity to have our voices heard.

The general agenda of the meeting would be:

- * Introductions of Unity Council Members
- * Introductions from our team of Scientists (credentials can be submitted before the meeting for vetting purposes)
- * Current issues of impacted residents
- * Solutions
- * Preventive measures

We all know the response to the East Palestine disaster could have and should have been better. As community members living this disaster, we would like to support you in your efforts to make us whole and to make sure this never happens again in another community. We have seized the opportunity to educate ourselves over the past year and we would like to share that knowledge with Alan Shaw to ensure decisions are made in the best interest of all impacted residents.

We look forward to hearing from you.

Unity Council for EP Train Derailment

Jami R. Wallace, J.D., M.P.A.
President, Unity Council
Unitycouncil2023@gmail.com

EXHIBIT 36



There is an imminent threat to the life and safety of the East Palestine residents

We are writing this letter to let the world know that East Palestine, OH and neighboring impacted communities including Pennsylvania! There is an imminent threat to the life and safety of our children, our families, our communities and we demand immediate relief and we demand it now!

Lifelong East Palestine, OH resident and mother of five boys, Candice DeSanzo, is a member of Unity Council that has been screaming for over a year that her children are sick. She was forced back into her home after relocation was cut off and fought Norfolk Southern to provide her an extensive house cleaning before she went home, not being offered by the EPA. After Senator Vance's office stepped in, Norfolk Southern agreed to have Mrs. DeSanzo's house cleaned extensively.

Even after the house cleaning, the family continued to suffer from symptoms of chemical exposure. Mrs. DeSanzo smelled a strong chemical smell in a bag of shoes that had been stored in her basement. She invited Mark Durno from the US EPA to her house to smell for himself. Mr. Durno admitted to smelling the chemicals in the bag and asked to take the bag with him. Mrs. DeSanzo declined.

The following day, Mr. Durno contacted Mrs. DeSanzo to see if he could stop by with his colleagues. He showed up to the DeSanzo home with a colleague from CTEH, Norfolk Southern's contractor. The Norfolk Southern Employee attributed the smell to an unopened box of cleaning supplies stored in the basement. She informed Mrs. DeSanzo that she could call if she smelled the odor again and they would place an air monitor outside of the house. The US EPA and CTEH both refused to test the indoor air and the DeSanzo family was left to suffer from their illnesses.

During the time period of September 19–26, 2023, Dr. Erin Haynes from the University of KY placed an air badge in the DeSanzo home for a week. Recently released results revealed that "The [level of BTEX \(Benzene, Toluene, Ethylbenzene, Xylene\)](#) measured at your location was higher than expected. In particular, xylene was measured above the US EPA's Reference Concentration (RfC), the level at which long term exposure to the chemical could result in health concerns." On September 27, 2023 [candace took photos of her children covered in rashes](#). We need to err on the side of human health and get residents out until ALL HOMES HAVE BEEN TESTED!

[Senator JD Vance and Sherrod Brown wrote a bipartisan letter](#) asking the EPA to test our indoor air and residential soil in East Palestine, OH and surrounding impacted areas including Pennsylvania. The EPA flat out refused. [Debra Shore](#) said she was aware of [the] letter from Senators Sherrod Brown (D-OH) and J.D. Vance (R-OH) to Michael Regan, head of the federal EPA, but reiterated the agency will continue to follow the science and rely on data that indicates the Feb. 3 rail disaster has had no negative impact on air quality 'The EPA is an agency that has a foundational commitment to base ourselves on science and the law. And the science in this case doesn't suggest that it is wise or potent to do that,' Shore said of indoor air testing." Senators Vance and Brown have also written letters [asking for Dioxin Testing](#) and [for a public health emergency](#) among other letters of support for impacted residents..

We needed help then, we need help now. We are desperate to get our families out of unsafe homes and chemical contamination. There is an imminent threat to the life and safety of the East Palestine residents.

Thank you,

Jami R. Wallace, J.D., M.P.A.
President, Unity Council
Unitycouncil2023@gmail.com

Candice DeSanzo, B.S.
Board Member, Unity Council
Unitycouncil2023@gmail.com

EXHIBIT 37

April 3, 2024

FOIA Discovery Shows EPA's Missteps Put East Palestine in Harm's Way

WASHINGTON – On September 21, 2023, Government Accountability Project filed a Freedom of Information Act request that would launch an investigation into the Environmental Protection Agency's (EPA) actions following the East Palestine Train Derailment. After a long and argumentative process, we received documents from the EPA on how it signed off on the vent and burn of the five vinyl chloride cars despite knowing hours before the unnecessary detonation that potentially deadly phosgene would be created. Additionally, the responsive FOIA documents reveal that an EPA attorney discouraged the EPA Region 5 external communications director from considering a potential public health emergency in East Palestine.

The FOIA documents released on March 12 revealed there were discussions amongst EPA officials about the possibility of declaring a public health emergency. However, on February 20, 2023, the EPA Regional Counsel decided it was "best not to get into this," despite acknowledging they had the authority to declare a public health emergency.

Generally, the EPA has denied responsibility for the open burn, a possible violation of their own statutes. Instead, EPA, which is the federal On-Scene Commander of the disaster, has said they were only acting in a supportive role and that the East Palestine Fire Chief and Ohio Governor made that call after consulting with Norfolk Southern and its contractors. OxyVinyls, the owners of the vinyl chloride in the derailed cars, told Norfolk Southern that the train cars were not polymerizing. However, the Fire Chief and Ohio Governor were not informed that the train cars were cooling and therefore not expected to cause a catastrophic explosion, according to the National Transportation Safety Bureau.

Emails show that confusion ensued, and missteps were made that put the public in harm's way. It was not until February 21 that the EPA acknowledged the residents' complaints of the potential for Dioxin being released after the burn. In an email between EPA officials, they acknowledged there would be concentration in the area, including air, land, and water. However, residents were not made aware of the official's concern. The EPA's ASPECT plane, which collects aerial data on the environment, was most likely to mostly see vinyl chloride and phosgene, a chemical and biological weapons expert told EPA officials two hours before the vent and burn. Both chemicals are extremely dangerous and toxic to humans and were captured in the plume from the detonation. The ASPECT plane, however, remained grounded in Pittsburgh the day of the vent and burn due to weather concerns and only began collecting air quality data the day after the detonation.

Government Accountability Project Environmental Investigator, Lesley Pacey, commented:

"These FOIA discovery documents shed light on critical missteps that jeopardized lives before, during and after the decision to vent and burn vinyl chloride and other chemicals spilled during

the East Palestine Train Derailment. The EPA knew the derailment would expose residents to deadly phosgene, but they allowed it to happen anyway. They also knew dioxins, the most dangerous toxins known to man, would be formed, internal emails show. But the EPA refused to test for dioxins in East Palestine until residents, environmental groups and lawmakers raised concerns. In recent months, the EPA distanced itself from the controversial decision to vent and burn, but early on released a statement admitting that the decision to vent and burn was made 'in consultation' with the EPA, the FOIA documents show. Equally shocking is the discovery that EPA avoided deeming the disaster a public health emergency. Taken as a whole, these documents reveal EPA's dereliction of duty to protect the public and the environment."

Contact: Mary Allain, Interim Communications Director

Email: marya@whistleblower.org

Phone: (202) 926-3304

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EXHIBIT 38

Tuesday, May 14, 2024 at 14:00:48 Eastern Daylight Time

Subject: Re: Toxicologist Assessment
Date: Monday, May 6, 2024 at 6:29:54 PM Eastern Daylight Time
From: Scott Smith
To: [REDACTED]
CC: 'Stacey Rinehart', 'Beth Kosar', 'Douglas Boxer', 'Russ Abney', 'Brennan Osborn', 'Joshua Grunda', Lesley Pacey, George Thompson
Attachments: Scott Smith Excerpts EP Testing Update from Mar-2024 5-6-24.pdf

[REDACTED]

Thanks for this e-mail and I am happy to help you and the East Palestine community in any way possible. I have made 26 trips to East Palestine with 30 rounds of testing since February 22, 2023.

As I am a whistleblower client with the Government Accountability Project ("GAP") too, Lesley Pacey, Environmental Investigator for GAP, copied on this e-mail is familiar with my testing and works with my entire scientific team which includes toxicologists and doctors. I have also copied toxicologist and expert witness, Dr. George Thompson, on this e-mail.

Given the response (below) you received from attorney Russ Abney and the toxicologist he used to apparently review some of your test results, I suggest that everyone on this e-mail get on a zoom call to discuss your testing in more detail. **I put my comments/questions in bold red to the e-mail you received from Anjali below.**

For background: On April 3, 2024 this story aired based on a press release and AP coverage related to the work of the Government Accountability Project: [EPA did not declare a public health emergency following the train derailment in East Palestine, officials say](#) along with this: [East Palestine EPA No Health Emergency NewsNation Connell McShane GAP Scott Smith Interview 4-3-24](#)

I have attached summary excerpts from one of the most recent town halls (March-2024) I did presenting to the affected residents of East Palestine that includes key summary information on Dioxin and PAH testing. This presentation details the Norfolk Southern/EPA Dioxin testing (baseline for a fingerprint that was buried on the EPA website) along with trends over time, a control sample where it is confirmed the plume did not deposit chemicals, and shows side by side impacts of chemical mixtures of Dioxins and PAH's that show clear and significant elevations over controls and/or RSL/screening levels set by Norfolk Southern/EPA contractor Arcadis. I suggest that we go through this with everyone one this e-mail on a zoom call.

Here is more background on the recent work of Lesley Pacey and GAP related to Norfolk Southern/EPA testing on February 17, 2024 that was buried on an EPA website: [EPA Continues Denial of Elevated Dioxin Levels in East Palestine, Ohio](#) and here: [Over 1,500 Pages of East Palestine Dioxin-Related Testing Found Buried on EPA Website](#)

From [this article](#) on January 26, 2024 attorney Jo Anna Pollock states: **"She [Jo Anna**

Pollock] says there has been a running theme. "That they [residents of East Palestine] have been living in distress and suffering health impacts", Pollock said. In the same interview here is another quote from Jo Anna Pollock: **"The fact that the community is still undergoing this cleanup process a year later there's no end in sight I think is particularly staggering," Pollock said.**" - then in this video you will see [my interview on CUOMO / News Nation on February 2, 2024](#), where the subject is you and the testing I did at your home. This interview goes right to the points made by Jo Anna Pollock on January 26, 2024 and builds upon them.

Mixtures of chemicals spilled from the derailment are a real issue and I point to this article for more information: [A Roll Of The Dice: The Unknown Threat Of Exposure To Chemical Mixtures](#)

Additionally, here is an excerpt from the CUOMO Town Hall on September 26, 2023 where, again, the subject is what happened to you and testing at your home: [Testing Shows Toxic Chemicals in East Palestine Resident's Home CUOMO Town Hall 9-26-23](#)

Anjali – would you like to circulate potential times and dates for a zoom call with everyone on this e-mail?

Best Regards,

Scott Smith
[Twitter/X: @WaterWarriorOne](#)
[Facebook: ScottSmithH2O](#)
Phone: (508) 345-6520

From: [REDACTED]
Reply-To: [REDACTED]
Date: Monday, May 6, 2024 at 5:42 PM
To: [REDACTED]
Cc: 'Stacey Rinehart' [REDACTED], 'Beth Kosar'
[REDACTED], 'Douglas Boxer' [REDACTED], 'Russ Abney'
, 'Brennan Osborn' [REDACTED], 'Joshua Grunda'
, Scott Smith [REDACTED], Lesley Pacey
[REDACTED]
Subject: Re: Toxicologist Assessment

Anjali / All,

Thanks for your e-mail.

I have copied Scott Smith and Lesley Pacey from the Government Accountability Project on this e-mail too.

As Scott Smith has done testing in and around my home multiple times, I have asked Scott Smith to respond in detail to everyone on this e-mail on my behalf.

I would like to personally extend an invitation to attorney Russ Abney and the toxicologist that reviewed the testing to stay at my home for a few days. Also, have Russ and/or the toxicologist visted East Palestine and witnessed any testing since the derailment?

[Yahoo Mail: Search, Organize, Conquer](#)

On Mon, May 6, 2024 at 3:35 PM, Anjali Mehta

<[REDACTED]> wrote:

[REDACTED]

I hope you are doing well. Attorney Russ Abney with East Palestine Justice had an MD/PhD toxicologist review your test results to learn what health risks you might face as a result of the toxins released from the train derailment. Here is the toxicologist's assessment, which we view as good news:

"I would expect this to be one of the most effected [sic] homes due to its location in proximity to Sulphur Run. Nonetheless, the test results do not show any significant contamination. **Can you tell me who this toxicologist is? What testing data did the toxicologist review? On what basis does the toxicologist say there is no significant contamination? Has this toxicologist visited East Palestine?**

The soil samples are reported as Parts per Trillion concentration (micrograms per liter) and are consistent with general historical environmental contamination levels in the vicinity. **On what basis is the toxicologist concluding that the soil samples are "consistent with general historical environmental contamination levels in the vicinity"? Has the toxicologist reviewed and/or tested any control samples like I did where there was no impact from the plume? What levels of contamination for each chemical is the toxicologist using to make this conclusion? Is the toxicologist aware of the RSL/screening levels as set by Norfolk Southern/EPA contractor Arcadis? I refer the toxicologist to my attachment to this e-mail and what I say above about mixtures of chemicals. Does this toxicologist have any input on the fact there are no standards for exposures to mixtures of chemicals? The chlorinated dioxins,**

furans and other polycyclic aromatic hydrocarbons are clearly of human origin, I have had experts on my team review the testing results and the experts concluded that the fingerprint of chemicals (Dioxins and PAH's) appears to not only match the fingerprint of the Norfolk Southern/EPA testing results that were buried on the EPA website but are not necessarily consistent with human origin and appear to be from the derailment. but not necessarily from the train accident, and are all below the level of quantifiable carcinogenic hazard. It would be useful to compare these results to other samples from the same area and outside of the derailment-effected [sic] area. See my attached testing results as this is exactly what was done with control samples and RSL/screening levels from the approved Arcadis East Palestine workplan. I look forward to follow up discussions with this toxicologist and this entire group on a zoom call to best help the community and affected residents of East Palestine.

The 2/12/2023 air sampling results are all negative and do not show any excess contamination.

The urine Thiodiglycholic acid levels are normal and near the lower detection limit of the analysis. This cannot be interpreted with regard to the derailment and subsequent events as the collection was performed in April, more than two months after any potential vinyl chloride exposure, and would not show anything related those events.

If this individual were my patient, I would reassure her that these test results show no evidence of excess ongoing chemical exposure from the rail accident. Nor do they show hazardous exposure as early as February 16, 2023 in her home. Again, on what basis and with exactly what testing details, did the toxicologist make this conclusion. This literally sounds like the Norfolk Southern/EPA narrative which is why I am so confused. I extend an offer to this toxicologist and anyone else on this e-mail to join me on the ground in East Palestine for follow up testing side by side.

I hope that this interpretation is helpful."

Thank you, [REDACTED]

Anjali

--

Anjali Atul Mehta, Esq.

Bevan & Associates L.P.A., Inc.

Bevan Professional Building
6555 Dean Memorial Parkway
Boston Heights, Ohio 44236

[REDACTED]

--Confidentiality Notice--

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From Lesley Pacey Government Accountability Project ("GAP") EPA FOIA

Summary of documents on Scott Smith from EPA – FOIA Request 2024-R-05-02354.

- EPA PR discuss their stance on Scott Smith after residents email them with concerns about the dioxins he is finding.
 - > Scott C Smith is testing the water and soil and finding dioxins which is like agent orange. Kids are sick with nose bleeds and headaches. These families need help! Don't cover it up. If it's safe, go live there! I live in Cleveland but my heart goes out to them.
 - > I'm sure if you interview the people from East Palestine they can give you that information. I saw his testimony and experience on TV. It just breaks my heart for this community that they are being lied to and their sickness continues. He talked about the dioxins he found in his samples. Common sense says these chemicals just don't go away! Help this community!
- EPA asks for Smith's address:
 - > On Mar 20, 2023, at 12:17 PM, McCree, Barbara <mccline.bbarbara@epa.gov> wrote:
 - > **Gloria Closing The Federal Government/EPA looking for my personal information**
 - > Please tell us where Scott Smith is located, please supply the address, city and state.
 - > Thank you.
 - > Barbara McCree "Multimedia Communications" at the EPA sent the e-mail
 - > Barbara McCree
 - > Multimedia Communications

Scott Smith

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From Lesley Pacey Government Accountability Project (“GAP”) EPA FOIA

EPA EAST PAINTER'S GUIDE

EPA Seems to have 120 people keeping tabs on me

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EPA's Sarah Watson and her tracking report on me

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Another note on this: At least in East Palestine, Scott Smith entered the auditorium, walked around and talked to nobody (I recognized him), and then left, last Thursday, the day he is claiming that he talked to EPA and NS. EPA has also not said we would test air filters, that recommend it, or...

Scott Smith

1

Message

From: Wood, Robert C. [Robert.Wood2@nscorp.com]
Sent: 2/19/2023 11:50:03 AM
To: Cole, Jacquelyn (she/her/hers) [cole.jacquelyn@epa.gov]
CC: Peters, Joshua [Peters.Joshua@epa.gov]; Maguire, Andrew [maguire.andrew@epa.gov]
Subject: RE: EPTD Figure Request - Containment Locations

Jackie,

You can reach out to me.

From: Cole, Jacquelyn (she/her/hers) <cole.jacquelyn@epa.gov>
Sent: Saturday, February 18, 2023 4:16 PM
To: Wood, Robert C. <Robert.Wood2@nscorp.com>
Cc: Peters, Joshua <Peters.Joshua@epa.gov>; Maguire, Andrew <maguire.andrew@epa.gov>
Subject: [EXTERNAL] RE: EPTD Figure Request - Containment Locations

Hi Robert,

I wanted to reach out to see if you have a figure of the containment locations that can be shared with EPA.

Second- I was also advised the agencies should be coordinating directly with Norfolk Southern rather than NS contractors. Who is the best person to reach out to if we have comments or requests of environmental contractors?

Thank you,

Jackie Cole (she/her)
On-Scene Coordinator
U.S EPA - Region 5

From FOIA and/or Documents Received by Scott Smith

February 19, 2023:

Norfolk Southern instructs EPA and other Agencies to "coordinate" with NS rather than NS contractors.

Scott Smith

February 17, 2023: Norfolk Southern Tests for Dioxins
(Note Composite Sample):

Scott Smith

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**February 17, 2023: Norfolk Southern Dioxin Testing Results
(Note Composite Sample):**

Detection Summary

Client: Norfolk Southern Corporation
Project/Site: NS East Palestine

Client Sample ID: WC-WS1-COMP (A1-A5)

| Analyte | Result | Qualifier | RL | MDL | Unit |
|---------------------|--------|-----------|-----|------|-------|
| 1,2,3,4,6,7,8-HxCDD | 220 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,4,6,7,8-HxCDF | 160 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,4,7,8-HxCDD | 27 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,4,7,8-HxCDF | 78 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,4,7,8,9-HxCDD | 44 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,4,7,8-HxCDD | 42 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,6,7,8-HxCDF | 66 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,7,8-PeCDD | 28 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,7,8-PeCDF | 51 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,7,8,9-HxCDD | 33 | | 5.7 | 2.3 | ng/Kg |
| 1,2,3,7,8,9-HxCDF | 33 | | 5.7 | 2.3 | ng/Kg |
| 2,3,4,6,7,8-HxCDF | 52 | | 5.7 | 2.3 | ng/Kg |
| 2,3,4,7,8-PeCDF | 57 | | 5.7 | 2.3 | ng/Kg |
| 2,3,7,8-TCDD | 5.0 | | 1.1 | 0.23 | ng/Kg |
| 2,3,7,8-TCDF | 23 | | 1.1 | 0.23 | ng/Kg |
| OCDD | 1100 | | 11 | 2.3 | ng/Kg |
| OCDF | 220 | | 11 | 2.3 | ng/Kg |
| Total HxCDD | 290 | | 5.7 | 2.3 | ng/Kg |
| Total HxCDF | 480 | | 5.7 | 2.3 | ng/Kg |
| Total HpCDD | 520 | | 5.7 | 2.3 | ng/Kg |
| Total HpCDF | 320 | | 5.7 | 2.3 | ng/Kg |
| Total PeCDD | 170 | 1 | 5.7 | 2.3 | ng/Kg |
| Total PeCDF | 450 | | 5.7 | 2.3 | ng/Kg |
| Total TCDD | 81 | 1 | 1.1 | 0.23 | ng/Kg |
| Total TCDF | 490 | 1 | 1.1 | 0.23 | ng/Kg |

**Dioxin TEQ is 91.9 ppt
which is 19X greater than the
regional screening level of
4.8 ppt**

Scott Smith
[REDACTED]

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Government Accountability Project East Palestine Investigation

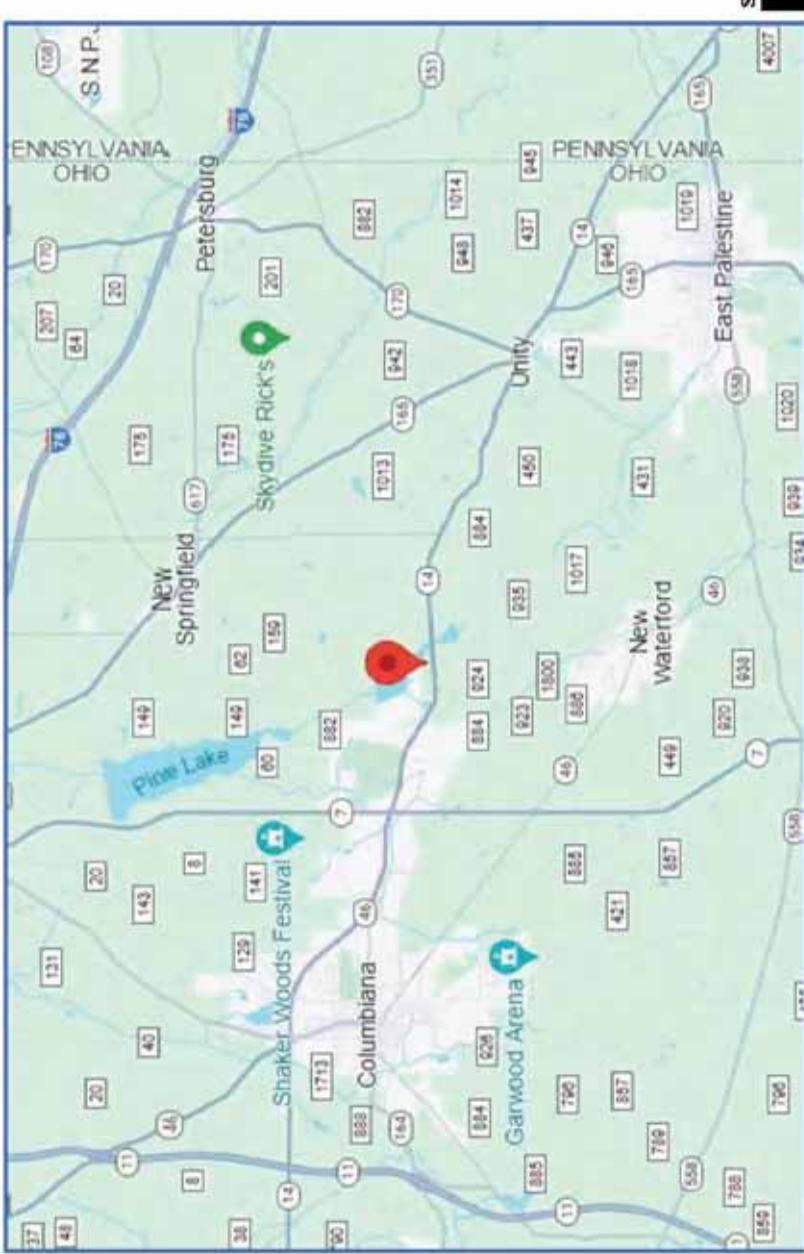
February 21, 2023: Norfolk Southern Tests Ditches for SVOC's and VOC's

Scott Smith

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On-Site: Where the toxic plume fallout deposited toxic chemicals
Off-Site: Where the toxic plume fallout was not ("control sample")



358 Government Accountability Project East Palestine Investigation

63 East Palestine Dioxin Soil Samples vs. Background And Regional Screening Level (“RSL”)

| East Palestine Number of Dioxin Soil Samples as of February 1, 2024 | 63 | |
|--|-----------|------------|
| Samples >3 ppt TEQ (Rural Background for Non-Impacted Communities) | 44 | 70% |
| Samples >4.8 ppt TEQ (Arcadis Proposed RSL Sep 7, 2023) | 29 | 46% |
| Samples >6 ppt TEQ (Residential Background for Non-Impacted Communities) | 25 | 40% |
| Samples >8 ppt TEQ (Urban/Industrial for Non-Impacted Communities) | 21 | 33% |

- 1) Median Dioxin TEQ is 4.8 ppt
- 2) Two Control Samples from Salem, OH: 4.0 ppt TEQ in April-2023 and 4.3 ppt TEQ in June-2023
- 3) **Control Sample from Beaver Circle, Columbiana, OH where Plume Fallout WAS NOT was 1.7 ppt TEQ.**

Scott Smith

[REDACTED]

East Palestine Crop/Garden Sampling

| Garlic Dioxin TEQ Comparisons | Parts per Trillion (ppt) | % Increase |
|-------------------------------|--------------------------|------------|
| Control Garlic | 0.81 | - |
| Garlic | 4.5 | 456% |
| Garlic | 440 | 54221% |

Note 1: Control garlic is from a sealed container from [REDACTED] Prior to Derailment.

Note 2: This is preliminary data and more testing needs to be done before definitive conclusions are made.

Scott Smith

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February 1, 2024 Update: Potential Dioxin Hot Zones – Need More Testing

| Dioxin TEQ Soil Comparisons | Parts per Trillion (ppt) | % Increase Over RSL |
|---|--------------------------|---------------------|
| Beaver Circle, Columbiana Control | 1.7 | -58% |
| Salem OH Control Soil | 4.0 | -17% |
| Regional Screening Level (RSL) | 4.8 | - |
| ZG Soil | 23 | 379% |
| TF Soil | 26 | 442% |
| SW Soil | 27 | 463% |
| BD Soil | 27.6 | 475% |
| RTO Soil | 30 | 525% |
| KH Soil | 34 | 608% |
| SG Soil | 49 | 921% |
| Enchanted Salon Soil | 59 | 1129% |
| Norfolk Southern-Arcadis 2-17-23 | 91.9 | 1815% |
| Brushville Supply Soil (1) | 460 | 9483% |
| Brushville Supply Soil (2) | 1900 | 39483% |

1. Norfolk Southern-Arcadis 2-17-23 is a Composite Sample at 91.9 ppt which means that (5) samples were taken and then blended together for (1) TEQ value.

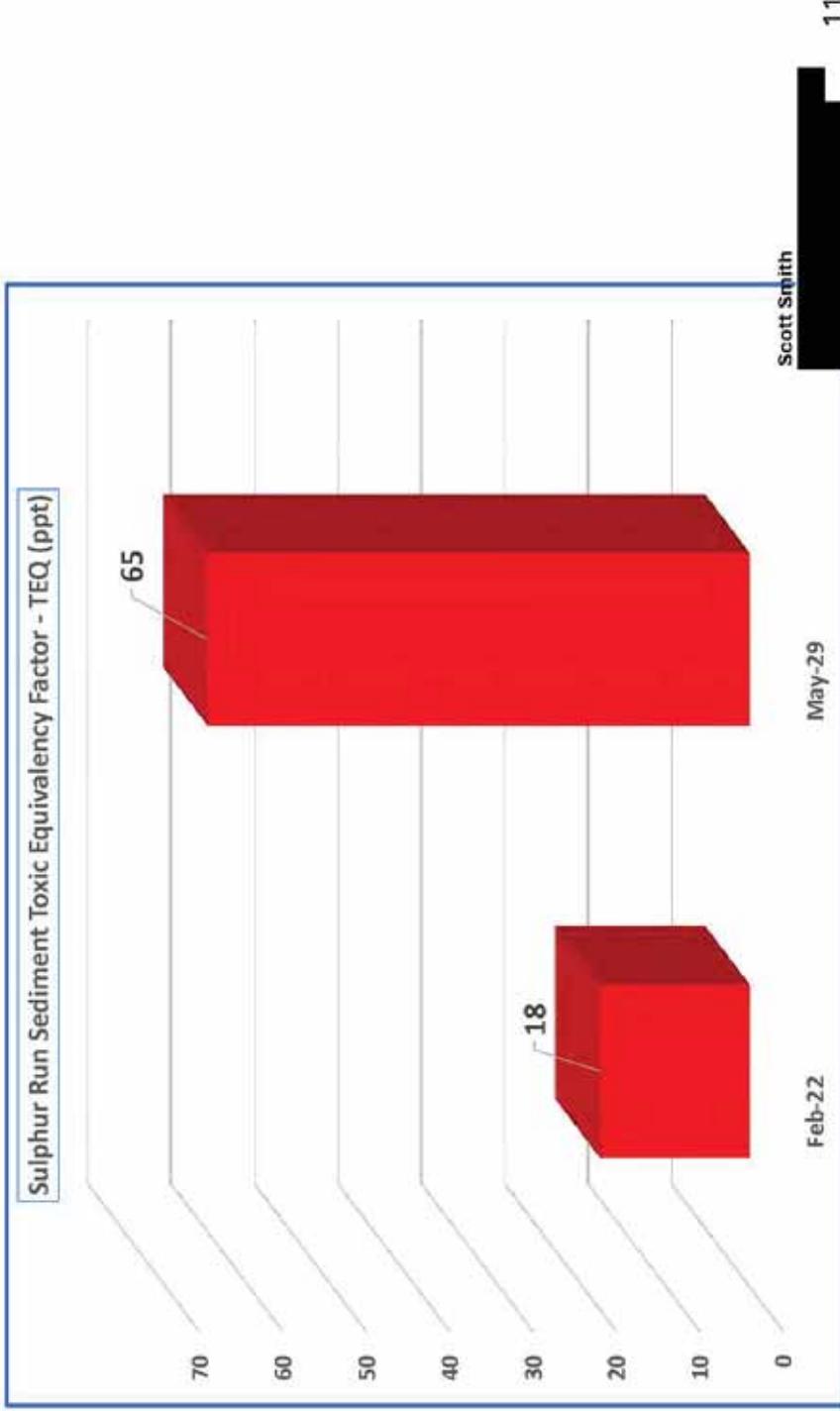
2. Why is this important to understand?

Scott Smith

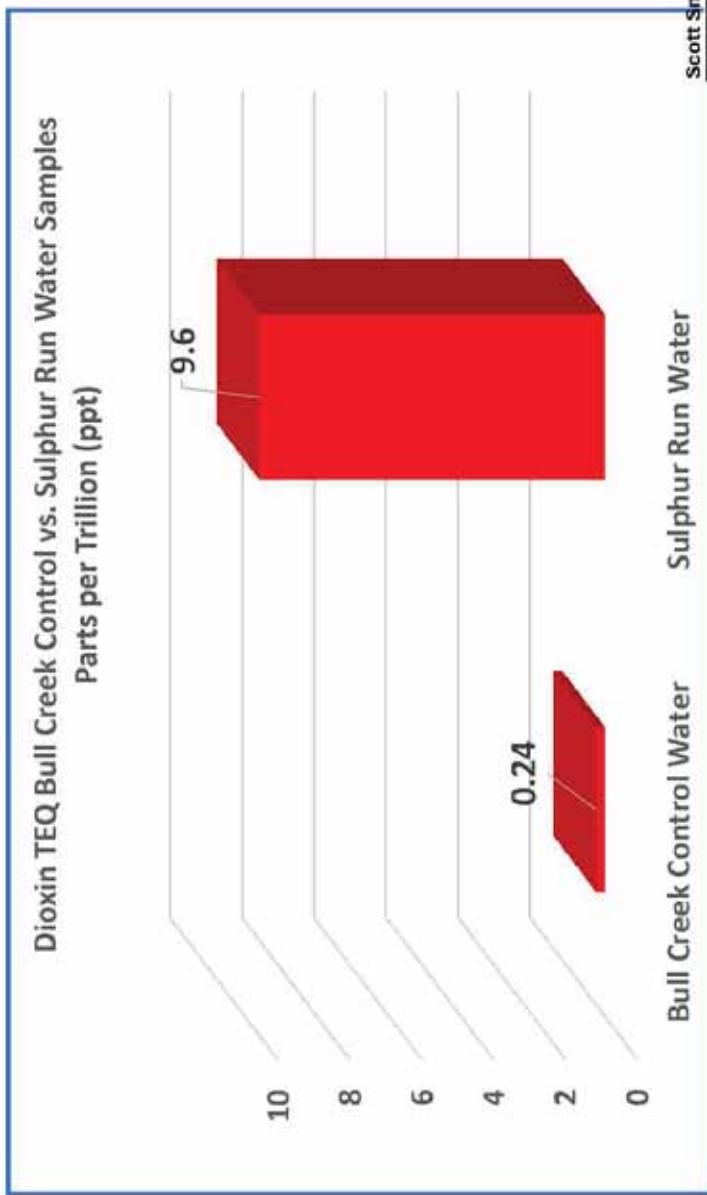
361

Government Accountability Project East Palestine Investigation

Sulphur Run Sediment Preliminary Comparisons – Dioxin TEQ (ppt)



| Dioxin TEQ Comparisons | Parts per Trillion (ppt) | Percent Increase |
|--------------------------|--------------------------|------------------|
| Bull Creek Control Water | 0.24 | - |
| Sulphur Run Water | 9.6 | 3900% |



Mixtures of Polycyclic Aromatic Hydrocarbons ("PAH") and Dioxins

| Soil Testing | PAH TEQ (ppb) | Dioxin TEQ (ppt) |
|--------------|---------------|------------------|
| EM Control | 30.6 | 1.7 |
| JS | 119.7 | 5.3 |
| RT | 129.7 | 30 |
| VL | 143.6 | 5.6 |
| BD | 155.7 | 27.6 |
| RK | 291.5 | 9.1 |
| SW Jun-13 | 346.4 | 27.0 |
| LM | 348.6 | 10.0 |
| ZG | 398.7 | 23.0 |
| SG | 420.5 | 8.8 |
| NV | 428.6 | 7.1 |
| AG | 493.1 | 6.8 |
| SMc | 496.3 | 9.4 |
| KF | 506.5 | 10.0 |

Scott Smith
[REDACTED]

Mixtures of Polycyclic Aromatic Hydrocarbons ("PAH") and Dioxins

| Soil Testing | PAH TEQ (ppb) | Dioxin TEQ (ppt) |
|--------------|---------------|------------------|
| EM Control | 30.6 | 1.7 |
| KF | 506.5 | 10.0 |
| ES | 705.6 | 59.0 |
| KH May-16 | 883.5 | 27.0 |
| BSH | 1277 | 1900 |
| ND | 1649 | 13.0 |
| KH Sep-25 | 2306 | 34.0 |
| TF | 2374 | 26.0 |
| HF | 3928 | 6.4 |
| MF | 37202 | 8.4 |

Scott Smith

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EXHIBIT 39

May 14, 2024

Whistleblower: EPA Failed to Deploy Critical Airborne Technology During East Palestine Disaster

WASHINGTON – Today, Government Accountability Project called for the Environmental Protection Agency's (EPA) Inspector General to investigate a groundbreaking whistleblower [affidavit](#). The whistleblower, Robert Kroutil, exposed shocking EPA efforts to avoid learning the truth immediately after the East Palestine train derailment – facts that would have prevented a year-long public health nightmare for residents based on data from its ASPECT (Airborne Spectral Photometric Environmental Collection Technology) airplane. If utilized properly, ASPECT could have prevented the vent and burn of the vinyl chloride tank cars and informed decision makers about when to order and lift evacuations. Unfortunately, EPA chose not to fly the plane until four days after the accident, turned off the sensors so they couldn't gather data over the creeks and then falsified associate records to cover up the mission breakdown.

The EPA chose to delay its high-tech chemical, heat, and radiological sensing aircraft despite no weather or flight safety concerns. When the plane did finally deploy to the derailment site on the fifth day of the disaster, after the plume from the February 6 detonation dissipated, the EPA ASPECT program manager inexplicably instructed the flight crew to turn off chemical sensors over the contaminated creeks. Later, the reports were altered to declare the open burn a success when EPA contractors reported that the data collected in East Palestine was inconclusive.

Robert Kroutil, former data quality manager for the EPA ASPECT program and creator of the ASPECT software, exposed a troubling pattern of negligence and misconduct that jeopardized public health and safety following the Norfolk Southern train derailment in East Palestine on February 3, 2023.

The EPA, as early as its February 16, 2023, [press conference](#), touted its high-tech ASPECT aircraft in East Palestine as part of its “robust” air quality monitoring that led to the lifting of an evacuation in East Palestine and ongoing EPA assurances that the air in East Palestine was safe to breathe. Less than two weeks after the disaster, EPA Administrator Michael Regan assured families that they were safe, stating, “From the very beginning, EPA personnel have been on site supporting local and state partners as they led emergency response efforts. We've had boots on the ground leading robust air quality testing including the advanced technological ASPECT plane and a mobile analytical laboratory.”

However, EPA ASPECT program managers, failed to initiate flights of the ASPECT plane for the first four days of the derailment when the chemical fires were burning, and residents were being exposed to a suite of deadly chemicals including dioxin, benzene, and phosgene. The delay occurred despite established protocols dictating [immediate deployment](#) in similar emergencies.

The [EPA ASPECT Report for East Palestine](#) is based upon data collection on the fifth day of the disaster after the chemical fires and massive open burn plumes had dissipated. The report notes that ASPECT was activated on February 5 and flown to Pittsburgh that day. But “due to low ceilings and icing conditions, the aircraft was unable to fly on 6 February 2023.” The summary concludes, “Spectral data collected downwind of the derailment showed no significant detections with only standard components of combustion noted.”

But our whistleblower detailed many points of concern in his affidavit, including:

- Despite what [EPA told Congress](#) during a hearing in March 2023, the ASPECT was capable of flying in the weather conditions on February 6 over the massive chemical open burn plume as well the three days prior. Its failure to collect data the first four days of the derailment prevented ASPECT from collecting data that could have prevented the unnecessary vent and open burn of dangerous chemicals;
- Critical chemical sensors on the ASPECT aircraft were inexplicably turned off by EPA program managers during both February 7 flights over contaminated creeks, preventing the detection of dangerous chemicals in Sulphur and Leslie Runs and Little Beaver Creek;
- Kroutil only had eight minutes of data to analyze that did not include creek data leading him to declare the data inconclusive. However, the final report released by the EPA ASPECT program on the East Palestine disaster mission, falsely presented the controlled burn of the railcars as “successful” due to the low detection of chemicals;
- The EPA ASPECT program manager instructed EPA ASPECT contractors to write new quality control protocols three weeks after the East Palestine flights and back date them before the incident and instructed contractors to avoid writing the words “East Palestine” in emails to avoid future Freedom of Information Act (FOIA) requests;
- EPA ASPECT program managers refused to provide Kroutil with flight Standard Operating Procedures (SOPs) and Quality Assurance Planning Protocols (QAPPs) under the guise that the always open-source information was now “proprietary” thus omitting critical data collection information needed to analyze ASPECT data.
- Kroutil was told by a manager at EPA ASPECT contractor Kalman & Company Inc. that he would be fired from his job if he did not withdraw an EPA FOIA he filed seeking EPA ASPECT SOPs and data quality objectives employed during its East Palestine response;
- And more startling details that are coming to light over a year later. This brave whistleblower exposes a disturbing lack of accountability and competence within the EPA ASPECT program, raising serious concerns about whether the agency can be trusted to respond honestly and effectively to environmental disasters and public health emergencies.

Government Accountability Project Environmental Investigator Lesley Pacey said,

"The data that led to the lifting of the evacuation in East Palestine was false, not robust after all. These revelations are deeply troubling and demand immediate action. The EPA not only deliberately failed to deploy and utilize the ASPECT aircraft when needed, but its directive to turn ASPECT's chemical sensors off over the contaminated creeks means EPA hid the fact that the creeks were highly contaminated. This is a serious breach of public trust and underscore the urgent need for accountability and reform within The Inspector General needs to investigate the EPA's mishandling of this disaster and take action to hold responsible individuals accountable. We urge policymakers to exercise oversight of the EPA for its malfeasance in East Palestine and support a disaster declaration, lifetime health care and health monitoring for East Palestine residents and neighboring impacted communities."

Government Accountability Project Legal Director Tom Devine added,

"EPA's "don't want to know" syndrome here shielded a criminal coverup whose consequences have ranged from nightmarishly tragic to deadly for East Palestine residents. After fifteen months of deception it is time for the truth and for accountability."

Contact: Andrew Harman, Communications Director

Email: andrewh@whistleblower.org

Phone: (202) 457-0034 x156

Government Accountability Project

Government Accountability Project is the nation's leading whistleblower protection organization. Through litigating whistleblower cases, publicizing concerns and developing legal reforms, Government Accountability Project's mission is to protect the public interest by promoting government and corporate accountability. Founded in 1977, Government Accountability Project is a nonprofit, nonpartisan advocacy organization based in Washington, D.C.

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EXHIBIT 40



1612 K Street NW Suite 808
Washington, DC, 20006
(202) 457-0034
whistleblower.org

May 14, 2024

Sean O'Donnell
Inspector General
Environmental Protection Agency
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Mr. O'Donnell:

The Government Accountability Project represents Mr. Robert Kroutil, recently retired data quality project manager at Kalman & Company Inc., an Environmental Protection Agency (EPA) contractor working with EPA's ASPECT program. Mr. Kroutil submits this whistleblowing disclosure to seek your investigation of criminal illegality, abuse of authority, gross mismanagement, and substantial and specific danger to public health and safety by EPA in gathering data to learn the full extent of contamination and public safety threats after Norfolk Southern's February 2023 train derailment. His 23-page affidavit and exhibits are enclosed.

Until his January 2023 resignation along with others in protest, Mr. Kroutil was EPA's software and oversight expert for the EPA ASPECT surveillance aircraft with responsibility for quality control of its data. As seen from his statement, at pages 20 – 21, he is a globally renowned expert on aerial surveillance of chemical contamination after accidents. He developed the software for ASPECT, which is the nation's most advanced resource to ascertain the existence, depth, and severity of chemical contamination threats after spills or other accidents. *Id.* at 21.

Mr. Kroutil and other colleagues were horrified, however, to learn that EPA failed to use this unique, indispensable technology to make informed, responsible decisions for protection of public health and safety after the accident. The specific allegations for which he seeks investigation follow:

- 1) Contrary to normal agency practice of deploying ASPECT aircraft immediately after a chemical spill, EPA waited until the fifth day after the East Palestine accident to deploy the ASPECT plane to the East Palestine derailment site for readings of data on the existence, volume, and temperature of spilled chemicals. By that point, the fires and smoke had dissipated thus impeding the ASPECT's ability to detect chemicals.
- 2) EPA made non-credible, intellectually insulting excuses to justify the agency's failure to take data after the East Palestine accident, such as the project manager having a sustained migraine headache, and assertions of unacceptable weather that contradicted weather reports and uninterrupted patterns of normal airplane traffic.
- 3) When EPA deployed the ASPECT plane from Addison, Texas to Pittsburgh three minutes before midnight on February 5, they failed to make any passes over the derailment site, thus missing the opportunity to detect temperature readings on the train cars, showing they were cooling and not in danger of catastrophic explosion. Had the EPA deployed ASPECT, it might not have been passive about the detonation of vinyl chloride train cars on February 6, 2023. The NTSB has since determined that the disastrous vent and burn, which released dioxin, phosgene, benzene, and a suite of other deadly chemicals into the environment, was unwarranted.

- 4) When the ASPECT plane flew over East Palestine the day after the vent and burn, February 7, 2023, the fires and smoke had dissipated thus impeding the ASPECT's ability to detect chemicals.
- 5) The EPA ASPECT's Program Manager Paige Delgado instructed system operators aboard the airplane to turn off the sensors over the highly contaminated creeks, which were and remain a threat to public health and safety in East Palestine.
- 6) Having declined to obtain relevant data, EPA Administrator Michael Regan then reassured the public that the air in East Palestine was safe to breathe, falsely relying on data that hadn't been taken from the ASPECT surveillance.
- 7) EPA project liaison Paige Delgado instructed Mr. Kroutil and other ASPECT staff to write QA/QC procedures three weeks after the East Palestine ASPECT mission and falsely backdate them to appear that the surveillance was conducted under professionally sound procedures, when in truth these procedures had not existed while the data was gathered.
- 8) Without conferring with ASPECT's experts' QC findings that data reassuring the public was inconclusive, EPA produced a report showing only low chemical detections and deeming the vent and burn that created over 100 toxic chemicals successful.
- 9) EPA project manager Paige Delgado instructed EPA ASPECT contractors not to use the words "East Palestine" for any records about their work in East Palestine, so the public would avoid receiving those records under the Freedom of Information Act (FOIA)
- 10) EPA has failed to properly maintain the ASPECT aircraft, resulting in grounding surveillance flights so they are unavailable to gather accurate chemical data from new spills and chemical disasters.

Mr. Kroutil requests the opportunity to brief your investigative and audit staff in-depth about the mission breakdown evidenced in his affidavit. Please let us know whom we should contact to follow through.

Respectfully submitted,



Tom Devine

Counsel for Mr. Kroutil

Cc: Senator J.D. Vance
Senator Sherrod Brown

Affidavit of Robert Kroutil

1. My name is Robert Kroutil. I am submitting this statement without any threats, inducements, or coercion to Lesley Pacey, who has identified herself to me as the environmental investigator with the Government Accountability Project. This statement evidences my experience regarding the EPA ASPECT airplane program and its delayed use and misuse during the East Palestine Train Derailment response (Exhibit 1).
2. Until January 27, 2024, I was the data quality project manager at Kalman & Company Inc. under contract with the EPA for the ASPECT airplane or ASPECT program.¹ Working with several colleagues, we developed the sensors in the aircraft. Nearly one million lines of software are on that sensor aircraft, and we wrote them all.
3. ASPECT,^{2,3,4} which stands for airborne spectral photometric environmental collection technology, is EPA's only real-time chemical and radiological detection platform.⁵ It provides infrared and photographs to aid for public health and emergency response incidents. The sensors can detect the existence and volume of chemicals and heat signatures at very low levels. The ASPECT plane flies these sensors at 2800 feet over the target and detects up to 530 different chemical compounds.⁶ The ASPECT plane is the EPA's only always-on-call emergency response system capable of mapping a chemical plume hazard, and to my knowledge is the only technology of its kind that could have been deployed to a civilian

¹ ASPECT: Behind the Science. (n.d.). www.youtube.com. <https://www.youtube.com/watch?v=uVxy-jrcnos>

² "ASPECT Airborne Spectral Photometric Environmental Collection Technology." n.d. Accessed May 9, 2024. <https://www.epa.gov/system/files/documents/2021-11/aspect-fact-sheet-2021.pdf>.

³ US EPA, OLEM. 2013. "ASPECT." www.epa.gov. April 11, 2013. <https://www.epa.gov/emergency-response/aspect>

⁴ Airborne Spectral Photometric Environmental Collection Technology. (2014).

https://www.epa.gov/sites/default/files/2014-09/documents/aspect_webinar_slides_09-11-14.pdf

⁵ US EPA, R. 06. (2023, April 13). ASPECT. www.epa.gov. <https://www.epa.gov/la/aspect>

⁶ "ASPECT: Flying for First Responders." n.d. www.youtube.com. Accessed May 9, 2024. <https://www.youtube.com/watch?v=f60r9sAozXs>

disaster like East Palestine. I believe that this passive remote sensing technology is the best in the nation and extremely critical to safeguarding the public in the event of a chemical plant explosion or a train car derailment.

4. I have nearly 40 years of experience as an infrared spectroscopist conducting infrared measurements of the atmosphere and have written a number of peer reviewed published reports on the technology.⁷ I was the data manager at Kalman and Company, an EPA contractor, for 10 years where I was a senior scientist. I am one of two people who can interpret and analyze the data collected by the ASPECT sensors.
5. The information from the ASPECT sensor system is obtained through a satellite communications system mounted on the aircraft. We at Kalman & Company do all the data analysis in Kansas. After the program difficulties that occurred with the government program management after East Palestine, I elected to retire. Two of my other colleagues retired as well. I retired due to mounting frustration over the conduct of the director of the ASPECT program.
6. As a senior scientist for Kalman & Company, I interpreted data from ASPECT plane missions and prepared reports for the EPA ASPECT program managers. The EPA ASPECT plane flies out of Addison, Texas at the direction of the EPA ASPECT program manager, a role currently held by Paige Delgado, and is able to start collecting data anywhere in the U.S. within fifteen minutes after liftoff. The plane is usually wheels up ready within an hour as per their contract specifications.⁸

⁷ Kroutil, Robert. 2006. "Emergency Response Chemical Detection Using Passive Infrared Spectroscopy." SPIE Newsroom.

https://www.academia.edu/73666571/Emergency_response_chemical_detection_using_passive_infrared_spectroscopy

⁸"ASPECT Airborne Spectral Photometric Environmental Collection Technology." n.d.
<https://www.epa.gov/system/files/documents/2021-11/aspect-fact-sheet-2021.pdf>.

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7. The EPA ASPECT contractor since 2016, Airborne ASPECT, operates the ASPECT plane and gathers data, which Kalman & Company receives. Kalman & Company analyzes this data and provides the analysis of ASPECT data to the government program managers who provide the data to toxicologists internal to the government.⁹ This data is supposed to be relayed in a short period of time by EPA ASPECT Program Manager Paige Delgado to the incident commander and other first responders. This allows us to determine the plume dimensions of the various chemicals that are spilled or burned that could be a threat to the public. ASPECT is the best capability that the EPA has to provide data immediately to the incident commander which allows first responders, the fire departments, and impacted residents to get the most accurate information about the environment so they can take protective action. But that is not what happened in East Palestine.
8. I am providing this statement out of concern for the health and safety of the residents of East Palestine and because I am troubled with how the ASPECT airplane, a one-of-a-kind sensor system and essential disaster response tool, was not deployed properly during the East Palestine disaster. If used in the appropriate time window and with proper procedures, the ASPECT aircraft has the ability to gather extremely sensitive real-time chemical data as well as thermal data on temperatures that should have resulted in an informed decision about whether the vent and burn¹⁰ was necessary.
9. The ASPECT plane instrumentation also would have detected dangerous chemicals used to inform important decisions regarding first responders and residential evacuations.

⁹ "The EPA Dragged Its Feet after the Ohio Train Derailment, Emails Show." 2023. HuffPost. September 15, 2023. https://www.huffpost.com/entry/epa-east-palestine-derailment-dioxins-foia-emails_n_65030f7ee4b04e47fed4fa5a.

¹⁰ "New Drone Video of East Palestine Train Derailment Shows Intensity of Fire." n.d. www.youtube.com. Accessed May 9, 2024. <https://www.youtube.com/watch?v=o7lJ0gTPTz0>.

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10. But EPA ASPECT program manager Paige Delgado and other program managers at EPA failed to fly the ASPECT plane the first four days of the derailment when the fires¹¹ were burning. I am privy to that information because I worked for Kalman & Company. I had a monitor in my office to monitor the aircraft's activity. Information gathered in the first four days following the derailment could have informed residents and first responders about chemical threats as well as heat signatures from the tank cars to show the cars were cooling and not in danger of a catastrophic explosion. The EPA should have had this aircraft flying over the train cars so they could detect the heat in the tanks. If they had done so, the ASPECT could have told Unified Command if the vinyl chloride in the train cars were polymerizing.

The EPA has equipment for this and apparently chose not to employ it for its intended use.

11. Typically, the aircraft would be deployed within a few hours of a train derailment. Instead, the EPA ASPECT did not fly over the East Palestine derailment and monitor the slow burn of chemicals on the night of the derailment, February 3rd. The EPA also failed to deploy the aircraft to the disaster site on February 4th and 5th while the chemical fires were still smoldering. I know this because I am the quality assurance data manager for ASPECT and during the disaster I watched the aircraft monitors from my office, wondering why the ASPECT aircraft had not yet been deployed.

12. The plane was eventually dispatched from its hangar near Dallas, Texas to Pittsburgh, the closest major airport near East Palestine, three minutes before midnight on February 5th, but I did not observe the aircraft operators, EPA subcontractor Airborne ASPECT,¹² make ANY passes directed by the government over the derailed train on the way to Pittsburgh through

¹¹ 2021. Whistleblower.org. 2021. https://whistleblower.org/wp-content/uploads/2024/05/2-DJI_0086-Rel-1-1.mp4.

¹² "About - Airborne ASPECT." n.d. Airborneaspect.com. Accessed May 9, 2024. <http://airborneaspect.com/about.html>.

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the monitoring system I have access to. To me, it makes no sense that they made no passes over the derailment site.

13. The East Palestine derailment was the oddest response I ever observed with the ASPECT program in over two decades with the program. Since it began in 2001, ASPECT has been deployed nearly 180 times to train car derailments, emergency responses, chemical plants, explosions, oil spills and other disasters. I have been involved in each of these deployments. The EPA contract requires the aircraft contractors to be off the ground within one hour of notification and in nearly every case that has happened. It should have been flown the day of the derailment event on February 3. It could have gotten to East Palestine that same day. In my experience with past train derailments, the ASPECT plane has consistently been deployed on the same day of the derailment.

Migraine grounded ASPECT for days?

14. Normally, EPA ASPECT can be deployed by a region, which in this case would have been EPA Region 5, or by the EPA ASPECT Program managers at EPA headquarters in Washington, D.C., but the official deployment of the plane has to be authorized by the Contracting Officer for the contractor Airborne ASPECT. However, if it is a national emergency, then EPA headquarters in Washington D.C can deploy the aircraft.

15. The staff's understanding was that Ed Argenta, who is the employee at EPA headquarters overseeing the entire EPA ASPECT program, saw a news report of the train derailment and sent several text messages over two to three days to Paige Delgado to contact the Contracting Officer at the U.S. EPA headquarters in Washington, D.C. and ask him to deploy the aircraft to East Palestine through the contractors.

16. I learned all of these details at an EPA ASPECT meeting this last fall in Olathe, Kansas that I attended between EPA ASPECT program managers and the government contractors including Kalman & Company and other government employees. At that meeting, EPA ASPECT Program Manager Paige Delgado said she did not answer her phone or see text messages Ed was sending her in the days after the derailment because she had a migraine and turned off her phone. Her assistant, the EPA ASPECT technical manager and Contracting Officer Representative was on vacation during the derailment and throughout the ASPECT mission in East Palestine.
17. If both of them were not available, then someone at EPA really should have been able to substitute fulfilling the agency's mission and deploy the aircraft. Her boss Ed Argenta should have called the Contracting Officer for Airborne ASPECT, who was also authorized to deploy the EPA ASPECT plane. The leadership of the EPA Region where the incident occurred, Region 5, could have also stepped in and deployed ASPECT if they could not get in touch with any of the EPA ASPECT headquarters staff. It makes no sense that EPA would not have a better way to deploy the ASPECT aircraft in the event of a national emergency.
18. You would think that if Ed Argenta could not get in contact with EPA ASPECT Program Manager Paige Delgado, then he would have gone to the Contracting Officer themselves and requested to get the aircraft up there in an emergency. If I couldn't get ahold of the person in charge, I would find someone else in the program to deploy the ASPECT. But apparently, they didn't do anything. As far as I know, they just sat there and waited. They should have gotten that plane up there immediately, within four or five hours after the derailment, not days later. That is how it has been done in every other chemical plant explosion or train

derailment. The longest delay I can remember is an hour and a half to get off the ground. It was due to a maintenance issue. It only happened one time.

19. That plane is supposed to be available and ready to go 24/7. So, the EPA ASPECT Airbone ASPECT contractors could have jumped in the airplane and flew up. It takes a while to get from Dallas to East Palestine in a very slow single engine plane. But it goes 150 knots so it can be there in a couple of hours to five hours or so and it can get up there and then start making passes. You want to fly over a train derailment in the first five to ten hours after the incident and while the fires are still burning. It is really advantageous if you have a plume. That big black plume – and fires that occurred after the derailment – is when you want to get in and collect data. The EPA ASPECT airplane should have made passes over the derailment site right away but certainly before the vent and burn. I think they chose not to know.

No chemical data gathered on day of the plume

20. On February 6, the day of the detonation and chemical plume, the plane stayed grounded at the airport in Pittsburgh. I know the EPA publicly blamed the reason why the plane had to stay grounded on low ceiling and icing conditions, but I suspect they could have flown it above the cloud deck and still detected the chemicals. That's a common solution. They could have flown above the plume like the other airplanes that were flying in and out of Pittsburgh that day.¹³ The ASPECT often flies over plumes in similar weather conditions but in a couple of missions they have stayed grounded before due to concerns regarding icing of the wings.

¹³ "Weather History | Weather Underground." n.d. [www.wunderground.com](http://www.wunderground.com/history/daily/us/oh/east-palestine/KPIT/date/2023-2-6).

21. However, EPA ASPECT did not authorize the plane to fly until the next day.¹⁴ Notably, the weather data reveals that there was no barrier to flying February 6, 2023, as it was a typical winter day without FAA warnings. Commercial and pleasure craft airplanes flew takeoffs and landings continuously during the critical plume deposition hours.¹⁵

ASPECT System operators shut chemical sensors off over contaminated creeks^{16 17}

22. When the plane finally flew on February 7, the plume (Exhibit 2)¹⁸ had dissipated, and system operators onboard the ASPECT made only a couple of passes over the derailment site. I knew the plume was gone due to photographs that were taken by the aircraft, which showed no smoke or fires. They flew about 30 hours after the open detonation. They did two flights that day and based on my knowledge of the sensor field of view, did not fly in a sensor package to point in the correct location (Exhibit 3). The FTIR, the Fourier Transform Infrared Spectrometer, is a sensor that has a ½ degree field of view and an eight-foot-wide view on the ground. It has higher spectral fidelity. Both sensors are coupled together and work in tandem with each other.

¹⁴ "U.S. EPA Responses to Questions for the Record -December 2023 House Energy and Commerce Committee Subcommittee on Environment, Manufacturing, and Critical Materials Hearing on 'Government Response to East Palestine: Ensuring Safety and Transparency for the Community' the Honorable Bill Johnson." 2023.

<https://docs.house.gov/meetings/IF/IF18/20230328/115562/HHRG-118-IF18-Wstate-ShoreD-20230328-SD026.pdf>.

¹⁵ Brandon Marc. 2023. "Passenger Photo While Plane Flew near East Palestine, Ohio ... Chemical Fire after Train Derailed." February 15, 2023.

https://www.reddit.com/r/pics/comments/112ptb9/passenger_photo_while_plane_flew_near_east/?utm_source=emb-edv2&utm_medium=post_embed&utm_content=post_body&embed_host_url=https://www.snopes.com/fact-check/airplane-smoke-clouds-ohio-train-derailment-photo/.

¹⁶ Stonesifer, Nick. 2024. "A Year after Ohio Derailment, Pair Monitor Waterways: 'There's Still Something Going On.'" Pennlive. February 16, 2024. <https://www.pennlive.com/news/2024/02/a-year-after-ohio-train-derailment-pair-monitor-area-waterways-to-prove-theres-still-something-going-on.html>.

¹⁷ East Palestine creeks visibly contaminated year after train derailment. (2024, February 2). NewsNation. <https://www.newsnationnow.com/us-news/midwest/ohio-train-derailment/east-palestine-creeks-visibly-contaminated/>

¹⁸ Delgado, Paige, Jill Chemical, Photometric Lead, Taylor Jillianne@epa, Gov, Charles Miller, Miller Charles, and T@epa. 2023. "ASPECT Mission Supporting: Region 5 On-Scene Coordinator ASPECT Response to East Palestine Derailment, East Palestine, Ohio Airborne Spectral Photometric Environmental Collection Technology ASPECT TEAM." <https://www.epa.gov/system/files/documents/2023-02/ASPECT%20Summary%20%20Report%20--%20East%20Palestine%20Derailment%20Rev1.pdf>.

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23. The EPA ASPECT Program Manager Paige Delgado was instructed by my boss at Kalman & Company to fly a "Christmas tree pattern" over the derailment site. This information was emailed to her as well as discussed in a Teams call that included me, EPA officials and other contractors. After my review of the data, it is my understanding that the ASPECT flights were not run in the traditional Christmas tree pattern (Exhibit 4). About an hour before the vent and burn, he recommended this to EPA ASPECT Program Manager Paige Delgado via email (Exhibit 5). He told Delgado in that email when they fly over East Palestine on February 6 during the open burn of chemicals, the ASPECT would see mostly phosgene and vinyl chloride from the BLEVE (boiling liquid expanding vapor explosion) and open burn. But those chemicals are hard to detect after the fact. Unfortunately, they did not fly on February 6 and when they flew on February 7, they had only about three passes over the derailment site and then a couple of passes downwind.

24. Other Kalman & Company employees and I tried to do the best with what we had. We usually get 10 to 12 times as much data from a mission than we got from the ASPECT plane deployment on February 7. We had very little data from over the derailment site and since the plane was not flown in the Christmas tree pattern, the readings may not have been taken in the correct locations.

25. The ASPECT has automated methods of detection for chemicals. When the plane is flying, the automated processing looks for 78 compounds while a longer hand review was looking for many more compounds. ASPECT can detect any compound that is infrared active in either the 3-5 and 8-12 micron wavelength spectral region. This chemical list of 78 compounds is essentially the chemicals most likely to be encountered in transportation

related incidents and that are also infrared active in either the 8-12- or 3-5-micron spectral wavelength region.¹⁹

26. For East Palestine, we focused carefully on looking for signatures of vinyl chloride and phosgene. Both of these compounds are extremely strong infrared absorbers and, thus, the detection limit, which is the level at which ASPECT is able to detect a chemical, is very good. ASPECT can detect both vinyl chloride and phosgene at very low levels. However, the aircraft only flew over the train derailment site a day after the tank cars were ignited in an open burn. There were no smoke plumes visible in any of the photos for any of the passes. Furthermore, there was no chemical vapor that could be detected because the derailment site was wet because it had been extinguished by the firefighters. The system works much better over plumes and active fires.

Also, sensors were turned off over the critical paths.

27. The ASPECT made passes over the contaminated creeks²⁰ supposedly to monitor for the variety of air toxins. However, when we got ready to make passes on February 7, the EPA ASPECT program manager Paige Delgado inexplicably instructed the Airborne ASPECT system operator in the aircraft to turn off all of the chemical detecting sensors over the creeks during both flights. I and other colleagues heard EPA ASPECT Program Manager Paige Delgado during a Teams conference call with the EPA ASPECT contractors on February 7 when the plane was flying over East Palestine request the system operators in the aircraft

¹⁹ "Airborne Spectral Photometric Environmental Collection Technology." 2014.

https://www.epa.gov/sites/default/files/2014-09/documents/aspect_webinar_slides_09-11-14.pdf

²⁰ "East Palestine Creeks Visibly Contaminated Year after Train Derailment." 2024. NewsNation. February 2, 2024. <https://www.newsnationnow.com/us-news/midwest/ohio-train-derailment/east-palestine-creeks-visibly-contaminated/>.

only collect photos over the creek areas. We also heard her tell system operators to turn off the EPA ASPECT's chemical detection system over the creek areas.

28. My colleagues and I thought this was an extremely odd request. I asked her during that call, "Do you really want to do this?" and I got no response back. We could not figure out why she was doing that. The creeks over which the EPA ASPECT chemical sensors were turned off include Sulphur Run, Leslie Run and Little Beaver Creek. If you look at the data set, Airborne ASPECT only collected geo-corrected photos over the creeks for all flights and have absolutely no chemical data over the creeks. I had never heard of turning off the sensor in any mission previous to the train derailment at East Palestine.
29. The ASPECT software can detect and quantify 78 compounds automatically using artificial intelligence methods and over 530 chemical compounds during a hand review. This is to help assess what the threat level is. The chemical sensors can detect phosgene and vinyl chloride because the technology is designed for emergency response chemical vapor detection. The sensor is primarily a vapor detection, which is why it does not detect dioxin. However, if the creeks were contaminated with butyl acrylate and other chemicals, the sensors would have detected them. Butyl acrylate is one of the 78 transportation chemicals that are programmed with AI automatic detection algorithms. I suspect that if they did not turn off the sensors over the creeks we would have known if these chemicals were present and at what concentration almost immediately.
30. Since I was responsible for the QA/QC for these chemical sensors, in addition to asking in our EPA Teams meeting why they turned off the chemical sensors over the creeks as we were speaking to them on February 7 while the mission was progressing, I also asked the EPA ASPECT Program Manager Paige Delgado to make additional passes with the airplane over

the creeks with the sensors turned on. I never got a response back from the EPA ASPECT program manager Paige Delgado and to my knowledge they never made any additional passes over the creek areas.

31. This is unprecedented in my experience for the ASPECT aircraft to turn off any sensors during an emergency response. I never understood what the EPA's logic was. Other personnel will also confirm that the sensors were turned off by the EPA ASPECT program manager, Paige Delgado, over the creeks at East Palestine. It does not make any sense.

EPA's ASPECT could have prevented the vent and burn

32. Also, the EPA's ASPECT plane has sensors that gather heat signatures on the ground. Had EPA flown the aircraft before the vent and burn, then the EPA would have obtained information to prove what NTSB (National Transportation Safety Bureau) investigators recently determined: the five vinyl chloride train cars that derailed were cooling and not in danger of causing a catastrophic explosion.²¹

33. The argument that me and my colleagues at Kalman & Company all gave the program managers is that you need to get ASPECT in the air immediately and go over those tank cars, because ASPECT can tell you all the temperatures of the train cars and if you had any concern they were going to blow up, you are going to be able to find it with the EPA's ASPECT aircraft.

²¹ "Explosions, Controlled Burn in East Palestine Train Derailment Were Unnecessary, NTSB Official Head Says - CBS News." 2024. <https://www.cbsnews.com/news/east-palestine-train-derailment-controlled-burn-unnecessary-jennifer-homendy-senate-hearing/>.

34. But the ASPECT plane did not get up into the air until February 7 and they never flew over East Palestine again. That was the day after the vent and burn and by then, most of the smoke had cleared. By that time, it was too late.²²

EPA touts ASPECT technology as part of its rigorous data in East Palestine anyway

35. The EPA in news articles and on its website for East Palestine claims to have continuously been testing the air since the derailment and that the air was safe to breathe.^{23,24}

36. EPA Administrator Michael Regan²⁵ touted²⁶ the ASPECT program in press conferences and in news reports following the East Palestine disaster. He said that during the East Palestine response, the EPA deployed the latest and greatest technology with state-of-the-art sensors. He said that ASPECT was providing the EPA with excellent information to determine where the threat was. However, they didn't even get the plane up there in time to use that technology and then they turned off the sensors over the contaminated creeks which could have shown the chemicals that remained after the vent and burn.

Protocols now “proprietary”/No QAQC or QAPP

37. The EPA Quality Assurance/Quality Control (QAQC) written policy requires an open-source set of standard operating procedures. This is so they can be reviewed and challenged. In

²² Deliso, Meredith. 2023. “East Palestine Derailment: Timeline of Key Events in Toxic Train Disaster.” ABC News. March 14, 2023. <https://abcnews.go.com/US/east-palestine-derailment-timeline-key-events-toxic-train/story?id=97522161>.

²³ US EPA, REG 05. 2023. “Background.” www.epa.gov. April 3, 2023. <https://www.epa.gov/east-palestine-oh-train-derailment/background>

²⁴ “Remarks for the East Palestine Press Conference, as Prepared for Delivery.” www.epa.gov. April 10, 2024. <https://www.epa.gov/speeches/remarks-east-palestine-press-conference-prepared-delivery>.

²⁵ “Remarks for the East Palestine Press Conference, as Prepared for Delivery.” www.epa.gov. April 10, 2024. <https://www.epa.gov/speeches/remarks-east-palestine-press-conference-prepared-delivery>.

²⁶ “U.S. EPA Responses to Questions for the Record -December 2023 House Energy and Commerce Committee Subcommittee on Environment, Manufacturing, and Critical Materials Hearing on ‘Government Response to East Palestine: Ensuring Safety and Transparency for the Community’ the Honorable Bill Johnson.” 2023. <https://whistleblower.org/wp-content/uploads/2024/05/HHRG-118-JF18-Wstate-ShoreD-20230328-SD026.pdf>.

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November 2022, prior to the East Palestine incident, we wrote a general set of Standard Operating Procedures (SOPs) and submitted them for government review. When you are dealing with highly technical sensor system and aviation, you write SOPs on the collection of data over a specific flight path. We wrote a common core set of open-source procedures, but we could never find out if they were using them during the East Palestine response or had any SOPs at all.

38. During the East Palestine response, our team was left in the dark on many levels. We were never privy to the SOPs for the East Palestine flights on February 7 and EPA ASPECT Program Manager Paige Delgado did not give us access to them. We were told the procedures used by the ASPECT operators to collect data were “proprietary,” so they were unknown to any of us analyzing the data. We had never heard that before. These procedures are the ground rules for gathering all the necessary data. If they are unreliable, so is the data. It just does not make any sense that you would hide the procedures from the public and any of the folks trying to analyze the data.

39. We are tasked with analyzing the data from the flights. But we never saw a SOP. We did not know how the data was collected, so we had no idea what the quality of that data was. We just have to go through the data and report what it is showing us. Whenever we asked them, “What is going on?” in an effort to learn their procedures, Paige Delgado would just say, “Well, it is proprietary.” It was indicated to us by Paige Delgado that EPA government personnel used “proprietary” data collecting procedures developed by the EPA contractor, Airborne ASPECT. My colleagues and I believe that since we wrote the original software for EPA ASPECT and designed the hardware for the plane, and this is a government program, all these procedures are required to be open to the public, or at least to us. All of this makes me

question whether the EPA ASPECT contractor's proprietary procedures were nonexistent during the East Palestine flights on February 7, 2023. If so, was the data gathered arbitrarily?

40. Airborne ASPECT also would not share its protocols. They did not want to talk with us, and they did not ask for help. We asked them, "How do you collect the data? What are your procedures?" But we never got answers or saw any Quality Assurance Project Plan (QAPP).

41. Those procedures must be open to the public because the public has to know how that data was collected. The contractor claims and EPA accepts that all their procedures are now proprietary, and nobody can see how they collected data. We don't understand how they are proprietary because we wrote the software and we're saying they're open domain, they're public. How can they say they are proprietary?

Asked by ASPECT program manager to write new protocols because they did not have them during the East Palestine response

42. We subsequently found out three weeks after the East Palestine ASPECT flights the ASPECT did not have any approved Standard Operation Procedures during its East Palestine disaster flights. About three weeks after the incident in East Palestine, during one of our weekly conference calls, the Program Manager Paige Delgado asked us about the QAPP (Quality Assurance Project Plan). She said her boss Ed Argenta had requested QAPP, but she did not have one. She said she was starting to receive EPA FOIA requests for information.

43. EPA ASPECT Program Manager Paige Delgado asked my boss at the time at Kalman & Company to write the procedures on how the data should be collected.²⁷ She told us to develop new QAQC procedures after the fact and back date the procedures to make it look like they were in place before the East Palestine derailment. She directed my boss to predate

²⁷2024. Whistleblower.org. 2024. <https://whistleblower.org/wp-content/uploads/2024/05/Robert-Kroutil-Statement.mp3>.

the quality assurance data plan in which he would not even consider or do. She made these requests over a Teams conference call with several contractors on the line.

44. To this day, I still do not have any evidence or documentation to describe what processes were used to collect data at East Palestine. These guys with Airborne ASPECT produced zero SOPs. They produced zero SOPs on the sensors. We created the SOPs for the sensors, so I do not know why it was proprietary. One of the problems we were having is that the ASPECT program managers really do not know how to operate the system. But they also do not ask for help. There was no dialogue on operating procedures. They never called for our help. They did not seem to want any help when we offered.

EPA ASPECT Program Manager instructed contractors to take steps to avoid FOIA discovery

45. On a Teams call with our scientific team around February 15, 2023, several weeks after the derailment, Paige Delgado told Kalman & Company not to put the words *East Palestine* in the subject line or in the body of our emails because they could be discovered through FOIA.²⁸ Other employees will confirm her directive but want to remain anonymous.

Told to withdraw my FOIA request or lose my job

46. The vice president for Kalman & Company, told me I would be fired after the EPA found out that I had filed a Freedom of Information Act (FOIA) request with the EPA in June 2023 (Exhibit 6). He said I would be fired within 24 hours if I did not rescind the FOIA, so I did. He told me that submitting FOIAs was against policy at Kalman & Company in their EPA contract. I checked my contract, and I could not find anything specifying that.

²⁸ United States Department of Justice. 2019. "FOIA.gov - Freedom of Information Act." Foia.gov. 2019. <https://www.foia.gov/>.

47. I filed this FOIA out of frustration, because no one would tell us the current operating procedures for the ASPECT plane. So, I asked specific questions about the East Palestine response in the FOIA. I did the FOIA because I could not find any QA/QC or QAPP documents for the East Palestine mission. No one would give them to us.

Scientists: ASPECT report summary data inconclusive

48. After looking at the data from East Palestine, we could tell the data provided from the ASPECT plane's two East Palestine flights on February 7 was incomplete and irregular. We had limited confidence in the data.

49. We had only eight minutes worth of data for four hours of the total East Palestine mission to work with. We decided during the ASPECT flights on February 7 that the EPA ASPECT operators needed to go back and collect more data. We told this to Program Manager Paige Delgado during the ASPECT flight over East Palestine on February 7 while we were monitoring the flight on a screen and talking to her on a call. But the EPA ASPECT Program Manager Paige Delgado said that the mission was complete. They flew away on February 7, and the planes never returned.

50. To summarize, we looked at some of the flight patterns on February 7, and they didn't seem to be consistent or flown where the plume had gone. By the time they flew, they missed the main event anyway and the sensors were turned off over the creeks. So, we wrote in our report that the results were inconclusive. We had so little data that it was sort of written under duress from EPA. The folks from EPA listed on the ASPECT report never looked at any of the data or cared to have a conference call with us to discuss the results.

51. But when the official East Palestine EPA ASPECT report was posted on EPA's website, it did not reflect our assessment of the uncertainty of the limited data. The ASPECT plane was up in the air for a couple of hours on February 7 but ASPECT only collected 8 minutes of chemical data over the targets. Normally out of the two-hour flight we have at least a half hour or an hour of data where we have the chemical sensors on. ASPECT usually makes multiple runs over several days. It was a haphazard deployment. They wanted to wave the flag and get out of there. So this report was very limited in scope.

52. We don't know what happened before or after the passes. The executive summary analysis was changed to modify the conclusion. The revised summary said the vent and burn was a success and there was only a low detection of chemicals.²⁹

Security Breaches

53. While at work, my colleague learned in January 2024 that ASPECT was having some ongoing cybersecurity problems. As they were in Kansas pulling the ASPECT technology equipment off the aircraft on April 19 so the plane could undergo some maintenance and upgrades, my colleague found some hidden cameras. When a colleague of mine deinstalled the equipment on April 19 so the airplane could undergo maintenance, all the cables, connectors and cameras were found in the airplane. It might have been for security reasons, but we never heard anyone telling us they were doing that.

54. Around this same time, I and two other EPA contractor colleagues in late January 2024 identified a data breach in a government computer belonging to the EPA ASPECT program.

²⁹ Delgado, Paige, Jill Chemical, Photometric Lead, Taylor Jillianne@epa, Gov, Charles Miller, Miller Charles, and T@epa. 2023. "ASPECT Mission Supporting: Region 5 On-Scene Coordinator ASPECT Response to East Palestine Derailment, East Palestine, Ohio Airborne Spectral Photometric Environmental Collection Technology ASPECT TEAM." <https://www.epa.gov/system/files/documents/2023-02/ASPECT%20Summary%20%20Report%20-%20East%20Palestine%20Derailment%20Rev1.pdf>.

This computer is the primary system that operates the EPA ASPECT program and generates data for EPA servers. The computer is located in the EPA ASPECT aircraft in a hangar in Addison, Texas. It includes a satellite system in which an unsecured network is operated with no hardware firewalls.

55. The EPA Office of Inspector General (OIG) started an IT (Information Technology) audit.

The complaint was to notify the government of a potential data breach within the EPA ASPECT aircraft government owned computer that led to a loss of government data and possible corruption of primary emergency response data.

56. The EPA OIG contacted me and asked me to submit a statement, which I did. My "confidential" complaint was submitted on April 2, 2024, to the OIG in which I indicated my belief that responsibility for the breach rested with EPA ASPECT Program Manager Paige Delgado. A week or so went by and the next thing we knew, I found out from a colleague that Paige Delgado had my name. I thought my complaint was supposed to be confidential.

Bid violations

57. Another EPA contractor working with EPA ASPECT, Spectral Systems Global Inc. (SSI), in 2022 had the highest technical evaluation and the lowest cost bid to oversee ASPECT's daily operations. They won the bid. But within a few days, SSI was told the bids were on hold. With no explanation, the Airborne ASPECT group was given a chance to bid on the contract and thereby won the bid without SSI receiving the opportunity from the government to

address any issues or bid again, nor were they provided with notice that this bid was awarded to Airborne ASPECT.³⁰ This was all extremely odd.

Long history with ASPECT

58. I am a PhD chemist with 40 years' experience. I helped design the software for the ASPECT airplane when I was at the Department of Defense (DOD). I was the Department of Defense Program Manager for the remote sensing equipment employed in defense programs and I transferred in 2000 to Los Alamos National Laboratory, where I remained for nine years.
59. In 2001, I was a senior scientist out at Los Alamos National Laboratory, in Los Alamos, New Mexico, where I was awarded the Distinguished Performance Award (Exhibit 7) in 2005 to develop this technology. I was selected for this award by the Los Alamos senior staff for technical contributions to advance the Nation's security. I had a number of projects at that time. However, the award (Exhibit 8) identified ASPECT technology as groundbreaking. At the time, Los Alamos had about 8,000 Ph.Ds. in the areas of chemistry, physics, electrical engineering, and biochemistry. It is one of the premier government-sponsored scientific institutions in the United States.
60. My colleagues and I at Los Alamos' Integrated Reachback Center also received a medal from the EPA in support of the citizens of Louisiana during Hurricanes Katrina and Rita (Exhibit 9). ASPECT was the only Government emergency response aircraft flying for 72 hours in Louisiana after Hurricane Katrina landed. We provided emergency response data that was used by locals and various people all the way up to the White House.

³⁰ "Contract 68HERH23F0056 Airborne Aspect." n.d. [Www.highergov.com](http://www.highergov.com). Accessed May 9, 2024. <https://www.highergov.com/contract/68HERH23D0003-68HERH23F0056/>.

61. The technology I helped develop at Los Alamos was transferred from DOD to EPA for the ASPECT plane. The afternoon of 9-11, our country was concerned that we had no airborne chemical detection capabilities for the country and if you remember 9-11, the island of Manhattan New York was basically closed off. EPA had all their equipment and trucks and they could not get over the bridge for at least 24 hours to do any kind of monitoring of the Twin Towers or Manhattan after 9-11. The ASPECT program was initiated by Christine Todd Whitman, who was director of EPA back in the 9-11 days, George Bush's days, and the technology that I developed at the DOD was transferred from the DOD to EPA, because back then we didn't have Department of Homeland Security.

62. The afternoon of 9-11, we needed the ASPECT plane because the country was worried about getting hit by a chemical attack the next week by the terrorists, and that's how the ASPECT program grew and that's how it got to the EPA. It probably should be in FEMA (Federal Emergency Management Agency) or Department of Homeland Security or something like that, but it got stuck in EPA and they never got removed. It just always sat at the EPA. Throughout the years, I wrote many peer-reviewed research papers on the technology I developed for the ASPECT plane.

Concerned about ASPECT's Future and Residents Impacted by Derailment

63. The ASPECT plane is the only one of its kind.

64. The EPA ASPECT program in recent years has been suffering from a lack of knowledgeable program managers. There have been three changes in management recently in the program and there has been turnover in the EPA Nuclear Consequence Management Advisory Division (CMAD). One CMAD manager has been there two weeks. The person in that position before them resigned.

65. I worry about incompetency and the large number of turnovers in the program. The EPA has three folks running this program with only two years of experience with a combined number of zero scientific publications to assist them working on ASPECT.

66. There has been a lot of turnover in the EPA ASPECT program. There have been seven EPA ASPECT program managers within the last four years. Every six months to a year, it seems that we have a new boss. Paige Delgado has been director of the program since 2022. Her boss, Ed Argenta, the former associate director of CMAD (EPA Nuclear Consequence Management Advisory Division) and former branch chief of the EPA ASPECT Program, also transferred jobs from the EPA after the East Palestine response and has now taken another position as a government employee within the Department of Defense Threat Reduction Agency (DoD DTRA) in Washington D.C. EPA has finally replaced his position. However, that person has only been in the job a few weeks. In addition, the CMAD Director, who is the overall supervisor, resigned about two months ago. The replacement for the director's job also has been in place for only a few weeks.

67. In April, colleagues of mine were asked to take all the equipment off of the plane due to an annual inspection and a 5-year corrosion test for rust on the wings. The plane is getting its regular repairs. But my guess is maybe the ASPECT program is not coming back. If so, this is our chance to get the technology equipment off the plane so the U.S. government has the chance to use it in the future. These sensors on the ASPECT are irreplaceable. I estimate they are worth 10 million dollars based the original cost and assembly of the sensors. Not even the DoD has anything close to this technology for responding to disasters and scan for potential threats. It is a very important technology and I want to see it used for a long time to come.

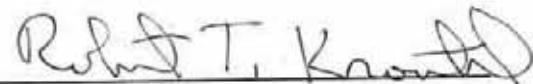
68. Unfortunately, the EPA staff has been decimated in its level of technical competence.

Affidavit of Robert Kroutil
Page 22 of 23

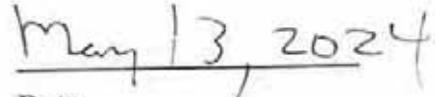
69. We had equipment that could have answered a lot of questions and saved exposure in East Palestine – even prevented the vent and burn – but it was not deployed and operated to collect that information in a timely manner and did not use the correct methods. This is why I am speaking out.

70. Unless major changes are made at EPA and with the ASPECT program, it is not going to get any better and EPA will be flying blind after the next chemical spill the way it did in East Palestine. I am disheartened that this important technology was not used properly to collect vital decision-making data for East Palestine following the derailment. My concern for the good people of East Palestine and my desire to inform them of the EPA's failures to protect them prompted me to speak out.

I have read the foregoing 23-page statement, and it is true, accurate and complete to the best of my knowledge and belief.



Affiant signature



Date

EXHIBIT 41

May 15, 2024 News Nation segment, "Independent testing finds toxic chemicals in East Palestine home." Available here: <https://www.youtube.com/watch?v=3i6LGHBHE8s>.

EXHIBIT 42

Justice & Health

Ohio and Pennsylvania Residents Affected by the East Palestine Train Derailment Say Their 'Basic Needs' Are Still Not Being Met

Impacted residents say two new settlements with Norfolk Southern, the company involved in the accident, won't provide their communities with the resources they need most.



By Kiley Bense [Twitter](#)

June 5, 2024

Share this article



President Joe Biden receives an operational briefing from EPA officials on the response

and recovery effort at the East Palestine, Ohio train derailment site on Feb. 16. Credit: Mandel Ngan/AFP via Getty Images

Residents of East Palestine, Ohio, and nearby areas in Pennsylvania harmed by the Norfolk Southern train disaster say a new **\$310 million settlement** announced by the Biden administration on May 23 will not meet their communities' most urgent needs, like access to health care for chronic conditions that emerged after the derailment.

Environmental Protection Agency Administrator Michael Regan told reporters last month that the settlement with Norfolk Southern was an attempt by his agency and the Justice Department "to once again make this community whole" after 38 train cars derailed in February 2023, leading to the venting and burn-off of vinyl chloride, the toxic chemical some of the cars were carrying.

Regan's words echoed President Joe Biden's remarks in East Palestine in February, when he vowed "to hold Norfolk Southern accountable and make sure they make your community whole now and in the future."

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The settlement came after Norfolk Southern announced in April that it would settle a class action lawsuit related to the **derailment for \$600 million**. The class action settlement "does not include or constitute any admission of liability, wrongdoing or fault" on the part of the **company**. Both settlements are pending approval by the courts.

Despite the size of these settlements, some residents in Pennsylvania and Ohio say the two agreements do not begin to cover their past and ongoing costs related to the derailment, like prescription medications, environmental cleaning, testing fees and relocation expenses.

“Neither of these deals announced in the past month come even close to making the impacted residents whole again,” said Hilary Flint, who lives about five miles from East Palestine in Beaver County, Pennsylvania.

Flint is one of a number of impacted residents in western Pennsylvania who have struggled to access resources for symptoms they say started after the venting and burning released more than 115,000 gallons of the carcinogen vinyl chloride into the environment. Flint has been renting a house in western New York for months so she can limit her time at her home in Pennsylvania, because she gets sick whenever she visits. In an interview in May, she said that she has bronchitis that started when she recently returned to Beaver County, and her doctor has advised her to avoid her home.

In 2023, Flint co-founded the Unity Council for the East Palestine Train Derailment, a community organization meant to help residents affected by the disaster access resources, advocate for their needs and get their questions answered.

“Neither of these deals announced in the past month come even close to making the impacted residents whole again.”

Unity council members traveled to Washington, D.C., last July to meet with lawmakers from Pennsylvania and Ohio as well as representatives from the EPA.

The council also weighed in on the class action settlement proposal in April. “How can you make an offer when people are still being exposed and you still don’t know the extent or results of that exposure?” council members asked in a statement. Another East Palestine resident called the class action settlement “a slap in the face.”

Flint said neither agreement would provide her with enough funding to cover the medical and housing costs she’s already paid, let alone her future costs. There is also not enough money available for her or her family to permanently relocate. The government settlement money is not going to individuals or families, and opting into the class action suit requires signing away the right to sue over claims in the future, Flint said. At a town hall held in May to inform the community about the class action settlement, **residents criticized the terms** and said the awards would not be enough to cover relocation or their medical costs.

“Why would I sign over my future health claims for less than \$20,000? That doesn’t even cover what I’ve spent on hospital bills over the past year and a half,” Flint said. “It’s a bad deal. It’s frankly a really, really bad deal. And I don’t know many people taking it.”

The settlement with the government includes \$235 million for “past and future” costs, including water and soil clean-up, \$25 million for community health monitoring for the next 20 years and mental health care, \$15 million in penalties for violations under the Clean Water Act and more than \$30 million for monitoring groundwater, surface water and private drinking water in the surrounding areas. Norfolk Southern will also be required to implement safety measures on its rails. The company said it has spent more than \$200 million on improving rail safety since the derailment.

In a statement provided to Inside Climate News, the EPA said medical monitoring and mental health services were included in the government settlement because “these are services that community members have repeatedly expressed an interest in receiving” that had been identified as “top priorities” in a stakeholder survey.

Alan Shaw, president and CEO of **Norfolk Southern**, said in a press release that the company will “continue keeping our promises and are invested in the community’s future for the long-haul.”

“From day one, it was important for Norfolk Southern to make things right for the residents of East Palestine and the surrounding areas,” he said.

“Over the last 15 months, the people of East Palestine have remained strong, resilient and committed to healing and restoring their community. But they haven’t spent a single day alone,” Regan told reporters. “Under President Biden’s direction, EPA personnel arrived on site within hours of the derailment. And we’re committed to remaining there until the hazardous contamination has gone.”



Smoke rises from the derailed cargo train in East Palestine, Ohio, on Feb. 4, 2023.
Credit: Dustin Franz/AFP via Getty Images

Jess Conard, who lives in East Palestine and whose son has developed asthma since the derailment, was similarly disappointed by the government settlement and by the proposed agreement for the class action claims. “I am glad that the EPA’s pockets are getting refilled by the polluter,” she said. “I think that the same level of responsibility should be applied to the community’s pockets. Our basic needs continue to be ignored.”

Conard said she has not been reimbursed for costs like her son’s asthma medication or environmental testing she had conducted at her home, which showed elevated levels of vinyl chloride on her porch. She wonders every day if staying in East Palestine is contributing to her son’s health condition. “No one’s looking to get rich off of this,” she said. “They’re just looking to heal and to make sure that they don’t go bankrupt if they relocate or to make sure that their kids get the medication that they need.”

When Conard requested funding for a filter for her well, she was asked if she lived within one mile of the derailment site, and her request was denied because she lives two miles away. The question is familiar to anyone living near the East Palestine site who has attempted to access aid from the federal or state government, residents say.

When the derailment first occurred, the EPA set a one-by-two-mile protective radius around the accident site that became the evacuation zone and has since been used as a guideline for allocating resources from the company and the government.

Residents who live outside the EPA’s radius have struggled to get help with cleaning, medical and relocation expenses, an issue that has not been remedied by the terms of the government’s settlement. To automatically qualify for the medical monitoring program outlined in the settlement, for example, residents must live within two miles of the accident site or near certain nearby waterways. Those living outside the two-mile radius must apply separately to qualify on a case-by-case basis.

Experts say chemical exposure and potential harm to the environment and to public health is unlikely to be confined within the EPA's boundary. EPA models of the **plume of soot** created by the vent and burn showed dispersal as far as Youngstown, Ohio, 20 miles from East Palestine, and Aliquippa, Pennsylvania, 25 miles away.

The class action lawsuit **covers claims** from residents and business owners located within 20 miles of the derailment site and personal injury claims within 10 miles. The mental health care services in the government settlement are available to anyone living in Beaver County or Lawrence County in Pennsylvania or Columbiana County in Ohio, as well as first responders.

The EPA spokesperson said the medical monitoring program is "intended to focus on individuals within the 2-mile radius who were most impacted by the derailment" and noted that the class action settlement's "potential, average" payment to households within the two-mile radius is \$70,000 and drops down to \$250 for families living 15 to 20 miles away.

Flint and Conard said that while funding for medical monitoring and research was important, what their communities needed most was access to covered treatment for the symptoms they are experiencing now. **Like other local activists**, Conard wants the federal government to issue a major disaster declaration for East Palestine, which she said would guarantee health care coverage for residents and grant access to other resources the community needs.

In response to questions about the lack of health care or medical treatment programs in the government settlement, EPA pointed to the existence of the East Palestine Clinic at East Liverpool City Hospital in Ohio, set up after the derailment to provide services for residents in 2023. “The clinic provides medical treatment and care,” the EPA spokesperson said. But Conard disputed the idea that this clinic is meeting the health care needs of residents, calling it “useless.” Conard said Pennsylvanians are not eligible to receive care there, and it is not free.

“In my mind, justice means none of us have to pay health care costs moving forward, because we are the guinea pigs now for this,” Flint said. Flint and other residents are being asked to participate in an array of public health studies to better understand the long and short-term impacts of the derailment on the population.

When she is feeling sick or develops a new symptom, like chronic itching or a need for an inhaler, she said, researchers are eager to collect her hair and blood samples. But they are not able to offer help accessing or paying for treatment or prescription medications. “Research is great, but what about care for the community? You can’t just use them as rats,” she said.

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More than a year on, the physical and mental toll of grappling with the aftermath of the derailment weighs heavily on both Flint and Conard. “Life is out the window,” Flint said. “This has become our life.” Between dealing with her symptoms and working to advocate for herself, her family and her community, she has had little time in the last year for ordinary things like hanging out with friends.

Conard spoke about the often “exhausting” and “terrifying” reality of living in East Palestine in the year since the derailment, trying to figure out how best to protect and fight for her family while contending with normal parenting responsibilities. “When I wake up and I hear news, I think, what fresh hell is this to deal with?” she said.

She compared the settlements to being repeatedly offered cheap coffee when residents only wanted water. “I have gratitude that things are moving forward. But the programs that we need still have not been implemented, and we’ve been asking for the same program since day one,” she said. “I’m tired of being told what I want, when I’m already telling you what I want and what I need.”

Marianne Lavelle contributed to this report.

Share this article





Kiley Bense

Reporter, Pennsylvania

Kiley Bense covers climate change and the environment with a focus on Pennsylvania, politics, energy, and public health. She has reported on the effects of the fracking boom in Pennsylvania, the expansion of the American plastics industry, and the intersection of climate change and culture. Her previous work has appeared in the New York Times, the Atlantic, Smithsonian Magazine, the Believer, and Sierra Magazine, and she holds master's degrees in journalism and creative writing from Columbia University. She is based in Pennsylvania.



EXHIBIT 43

East Palestine —Justice—

June 7, 2024

Dear Client:

Last month, the Federal Judge overseeing the Norfolk Southern train derailment case preliminary approved \$600 million Settlement Agreement that attorneys for both the Plaintiffs and Defendant entered into on February 3, 2024. We know that you have many questions about the settlement, what it means for you and your family and the process that will be implemented to administer the settlement. We started to help you understand the settlement in our April 15 Town Hall meeting, which you can view [here](#). But today we wanted to provide you with a set of Frequently Asked Questions and Answers related to the Settlement.

Before you read our questions and answers below, we want to invite you to attend one of two Client Update meetings that we will host via Zoom, the internet video conference platform.

Please mark your calendar for the following dates and times:

Tuesday, June 11
2 pm Eastern Daylight Time

Thursday, June 20, 2024
2 pm Eastern Daylight Time

IMPORTANT: YOU WILL NEED TO REGISTER TO ATTEND EITHER ONE OF THESE CLIENT UPDATE MEETINGS. REGISTER BY CLICKING ON THE LINKS PROVIDED BELOW EACH MEETING .

When: Jun 11, 2024 2:00 PM Eastern Time
Topic: East Palestine Justice Settlement Overview Town Hall

To register in advance for this webinar, click on link below

https://us06web.zoom.us/webinar/register/WN_ynXHQ6nfRpm8EA_hmZ8-Qq

When: Jun 20, 2024 2:00 PM Eastern Time

Topic: East Palestine Justice Settlement Overview Town Hall

Register in advance for this webinar:

https://us06web.zoom.us/webinar/register/WN_pIHjaH2_QAa_s_Ykt-Srug

Lead trial lawyer Mikal Watts will be joined by our Ohio counsel Bevan & Associates to go over the Settlement Agreement and what steps you need to take to participate in the program.

What action did Federal Judge Benita Pearson take on May 21, 2024?

Judge Pearson preliminarily approved the Settlement Agreement that the parties filed with her on April 3, 2024. The \$600 million settlement calls for Norfolk Southern to pay Class Members that file a claim by the deadline. The preliminary approval gets the clock started on notifying all Class Members and on Class Members taking the various actions needed to preserve their rights and meet their obligations under the terms of the Settlement Agreement.

I thought this was a Mass Tort, not a Class Action?

When you signed up with us, we worked hard to develop the legal theories and causes of action that would have us pursue the case as a Mass Tort, which would mean that you would have your own lawyer, and your own case. However, so that we could settle the case before the two-year statute of limitations expires in February, 2025, the parties agreed to a class settlement mechanism. We are in agreement with this approach, and recommend you participate in this settlement program.

Who is included as a Member of the Class?

According to the Settlement Agreement, the Members of the Class are "All Persons and Businesses residing, owning or otherwise having a legal interest in property, working, or owning or operating a business within a 20-mile radius of the Derailment Site, from February 3, 2023 to the execution date of the Settlement Agreement. Excluded from the Settlement Class are Norfolk Southern, and any of its parents, subsidiaries, or affiliates; all duly elected and approved officers of Norfolk Southern, and all directors of Norfolk Southern; and the judge presiding over this Action and the judge's staff."

What does this mean for our Attorneys' Fees? Will we have to pay both you and Class Counsel?

In the Settlement Agreement, Class Counsel has proposed attorneys' fees of up to 27% to be paid out of the Settlement Fund. The Federal Judge will ultimately approve the specific amount of attorneys' fees that will be paid out of the Settlement Fund. If you participate in the Settlement, we will not charge you any additional attorneys' fees above and beyond the level of fees Class Counsel is approved to receive.

What happens now that the Class Settlement has been preliminarily approved?

The first thing to happen is that the Judge-approved Settlement Administrator, Kroll Settlements, will soon begin giving all Class Members notice of the settlement, the various deadlines to act and describing what each person/business needs to do. We understand that many clients have already received such notice.

Kroll will conduct notice through the following methods:

- Direct Notice via First Class U.S. Mail to potential Settlement Class Members identified as a resident or business in within a 20-mile radius of the Derailment Site through the use of two (2) address search services;
- Local Newspaper in 10 surrounding communities;
- Online display banner advertising geo-targeted within a 20-mile radius to reach potential Settlement Class Members;
- Google keyword search advertising;
- Social media advertising through Facebook, Instagram, and YouTube within a 20-mile radius;
- A press release geographically targeted.

At the time you read this email, it is likely that you have already received at least notice via the United States Postal Service along with a set of Claim Forms.

What are the components of the settlement?

The Settlement will be distributed, with the assistance of a Settlement Administrator, to class members in three components as follows:

1. Direct payments to class member households for all class action claims (except for business loss and personal injury), including nuisance, trespass, property damage/diminution, medical monitoring and mental or emotional injury or harm;
2. Business loss payments to qualifying businesses with proof of actual net loss in 2023;
3. Optional personal injury claims for persons within a 10-mile radius of the derailment site.

In addition to paying the Class Members who timely file a claim, the Settlement Agreement calls for 3% of the \$600 million to go to Settlement Administration (Kroll) and up to 27% of the Settlement to be awarded to the Class Counsel (attorneys' fees). Any decision on the total level of attorneys fees (up to 27%) will not be made until the Federal Judge holds a Final Approval hearing in September.

What are my options and what are the deadlines?

Your options will depend upon where you lived or worked in relation to the derailment, or if you own a business.

If you lived, worked or owned property within 10 miles of the derailment site on February 3, 2023, you will have to make two decisions.

1. File a Claim or Opt Out

The first decision you will make is if you want to participate in the settlement. To do so, you will need to file a Claim form before the deadline, which we believe will be August 22, 2024. This is called the Direct Payment program. You will not be able to receive a payment if you do not fill out a Claim Form by that deadline.

If you file a Claim Form, get an offer and accept an award, then you will be required to sign a document which releases Norfolk Southern from any past, current and future liabilities related to nuisance, trespass, property damage/diminution, medical monitoring and mental or emotional injury or harm.

If, on the other hand, you do not want to participate in the Settlement, you must "opt out" by **July 1, 2024**. To opt out, you must follow very specific instructions that are included in the Notice that you will receive in the mail. If you do not opt out and you do not file a claim form, then you will be bound by the settlement (meaning you can't sue for property damage in the future) and you will never receive compensation for those claims.

If you need guidance or assistance in completing these forms, please reach out to us so that we can provide that service.

2. File a Voluntary Personal Injury ProgramThis option is only available to people who lived or worked within 10 miles of the derailment site on February 3, 2023. If you can prove that you lived or worked within that distance, you have the option of filing a claim for Personal Injury. This is a voluntary program.

If you choose to participate, you will be required to release Norfolk Southern for any past, current or future liabilities related to your personal injuries. If you want to preserve your rights to sue Norfolk Southern for any personal injuries, known at this time or not known, you should not participate in this voluntary program.

It is important to know that the court approved notice being sent to all Class Members indicates that the ***potential average payments*** for the voluntary Personal Injury program will be as follows:

- For those that live 0 - 2 miles: \$10,000
- 2 - 5 miles: \$5,000
- 5 - 10 miles: \$1,000

It is our understanding that these payments will be made to people without requiring any proof of injury. If, however, you live within the 10 miles radius and have suffered provable injuries, you will be able to submit extraordinary injury claims. In order to receive payment for extraordinary injuries, you will be required to submit medical records and other proof of injury. You should obtain any such medical records from your medical providers as soon as possible.

We believe you will have the right to appeal within the claims process program if you do not feel the amount being offered to you adequately compensates you for your injuries.

If you need guidance on whether to apply for the voluntary Personal Injury program or need guidance in filling out the form, or assistance in completing it, please reach out to us.

If you lived, worked or owned property between 10 and 20 miles from the derailment site on February 3, 2023, you will have one decision to make.

1. File a Claim or Opt Out

If you want to participate in the Settlement. To do so, you will need to file a Claim form by August 22, 2024. This is called the Direct Payment program. Please be aware that you will never receive a payment under the Settlement Agreement if you do not fill out a Claim Form by that deadline. In order to receive a payment, you will need to sign a document that releases Norfolk Southern from any past, current and future liabilities related to nuisance, trespass, property damage/diminution, medical monitoring, and mental or emotional injury or harm.

If, on the other hand, you do not want to participate in the Settlement, you must "opt out." To opt out, you must do so by **July 1, 2024** and follow very specific instructions that are included in the Notice that you receive in the mail.

If you need guidance or assistance in completing these forms, please reach out to us so that we can provide that service.

If you owned a business within 20 miles of the derailment site on February 3, 2024 and suffered net business losses, you will have one decision to make.

If you meet this definition, you will need to decide if you want to file a Business Loss claim. To participate in the business loss program, you will need to file your claim form by August 22, 2024. You must be able to provide evidence that your business suffered actual net income loss during this time period. To participate in this portion of the settlement, you will be required to complete the Business Loss Claim form that you receive in the mail. You will be required to sign a document that releases Norfolk Southern from any claims of future business loss

liability, known or unknown, before you will receive any payment.

If you need guidance or assistance in completing these forms, please reach out to us so that we can provide that service.

How much will I receive from the settlement?

At this time, we are not able to tell you precisely how much you or your family will receive. However, the Notice you have received or will be receiving does list estimated potential average lump sum amounts a household could receive for the direct payment program.

If your household is within 0-2 miles of the derailment site, the average lump sum amount could be \$70,000. If your household is from 2 – 4 miles, the potential amount is \$45,000, from 4-7 miles the potential amount is \$30,000; from 7-10 miles, the potential amount is \$15,000; from 10 – 15 miles, the potential amount is \$500; from 15-20 miles, the potential amount is \$250.

How do I fill out my claim form to make a claim?

If you have received your form in the mail or you have downloaded and printed it from the settlement website, please fill it out, and take it to our office, or make an appointment with someone in our office to help you fill the form out in person, or over the phone. Our staff is prepared to answer any questions you may have and will assist you in getting through the process. We prefer that you come to our office in person to make sure that we are as thorough as possible in helping you with your claim.

What is the Class Member ID?

You should have received or will be receiving Notice about this settlement from the Federal District Court. That Notice should also include the two Claim Forms – Individual Claim Form and the Business Loss Claim Form. If you are completing the Claim Forms that were mailed to you, you will not need to complete the Class Member ID section as that was pre-printed on the Claim Form that you received.

However, if you downloaded the Claim Form from the settlement website, you will need to complete this section. On the claim forms you will see something that looks like the below

image:



830360000000

MUST BE FILED
ONLINE OR
POSTMARKED
NO LATER THAN
AUGUST 22, 2024

In re: East Palestine Train Derailment
United States District Court for the Northern District
of Ohio
Case No. 4:23-cv-00242-BYP

INDIVIDUAL CLAIM FORM

For Office Use
Only

CLASS MEMBER INFORMATION

Current Resident: _____
First Name _____ Last Name _____

Street Address _____

City _____ State _____ Zip _____

Class Member ID: 8 3 0 3 6 _____
(if you received a Notice packet, this number can be located near the address we mailed to.)

If you receive a claim form in the mail, it will have the Class Member ID prefilled. If you are forced to complete a copied form or an online form, then you should call the Kroll Settlement office at 1-833-425-3400 to obtain the claim number for your residence/individual. Once you receive that Class Member ID, write it onto your Claim Form in the section provided.

What if I choose to opt out of the settlement?

You are free to make what you think is the best decision for you and your family. Your lawyers recommend that you participate in this settlement, as it represents the best opportunity for you and your family to get financial compensation for the impacts of the train derailment.

As we explained in our April 15, 2024 Town Hall meetings, the investigation and discovery that we conducted led us to believe that the derailment was caused by Norfolk Southern. However, the challenge we face in this case is being able to meet our burden of proof to demonstrate that your exposure to the chemicals released in the derailment and burn caused the damages being alleged – both the property damages and the personal injuries. As lawyers who have been doing this type of work for many years, we do not believe we would be able to overcome

this challenge in a trial. Given this and in our judgment, we recommend that you participate in this Settlement, as it represents the best opportunity for you and your family to get financial compensation for any impacts you suffered in the derailment.

If you choose to opt out of the settlement, you will no longer be represented by our law firms, as we will not be pursuing any other legal claims against Norfolk Southern for the impacts of the February 3, 2023 derailment. We have made this decision based on what we explained above – that we do not believe that we could win a case in a court due to the challenges of proving the chemical release and exposure led to provable damages.

What if I choose to object to the settlement?

If you choose to object to the settlement, we will end our legal representation of you and you are free to choose other legal representation to pursue your objection.

What is the difference between opting out of the Settlement and objecting to the Settlement?

Objecting is telling the Court you do not like something about the Settlement and it should not be approved for any of the Settlement Class Members. You can object to the Settlement only if you do not exclude yourself from the Settlement. You can still get the Settlement benefits if it is approved over your objection.

Excluding yourself from the Settlement is opting out and telling the Court that you do not want to be part of the Settlement. If you opt out of the Settlement, you cannot object to it because it no longer affects you.

You cannot opt out of the Settlement and object to it.

Before we end this email, we want to remind you again to register to participate in one of the two Zoom Video Conference Town Hall meetings below.

IMPORTANT: YOU WILL NEED TO REGISTER TO ATTEND EITHER ONE OF THESE CLIENT UPDATE MEETINGS. REGISTER BY CLICKING ON THE LINKS PROVIDED BELOW EACH MEETING .

When: Jun 11, 2024 2:00 PM Eastern Time

Topic: East Palestine Justice Settlement Overview Town Hall

To register in advance for this webinar, click on link below

https://us06web.zoom.us/webinar/register/WN_vnXHQ6nfRpm8EA_hmZ8-Qq

When: Jun 20, 2024 2:00 PM Eastern Time

Topic: East Palestine Justice Settlement Overview Town Hall

Register in advance for this webinar:

https://us06web.zoom.us/webinar/register/WN_pIHjaH2_QAa_s_Ykt-Srug

Lead trial lawyer Mikal Watts will be joined by our Ohio counsel Bevan & Associates to go over the Settlement Agreement and what steps you need to take to participate in the program.

As always, we thank you for trusting us with your case.

Sincerely,

The East Palestine Justice Team

EXHIBIT 44

EXCLUSIVE: EPA Hid Discovery of Toxic Vinyl Chloride in East Palestine, Won't Disclose Levels They Detected

"We direct Norfolk Southern to deal with it," EPA official told PA resident after admitting EPA found vinyl chloride in soil at derailment site. "They're hiding things they find," chemist tells us

JORDAN CHARITON

JUN 11, 2024

12

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Share



Since the catastrophic Norfolk Southern derailment and detonation of 116,000 gallons of toxic vinyl chloride over East Palestine, Ohio in February 2023, the EPA has insisted its

“Regarding the VC detection, the whole reason that we are doing this massive confirmation sampling effort is to verify that the cleanup was complete,” Mark Durno, the EPA’s on-scene coordinator in East Palestine, texted on May 20 to Christina Siceloff, a Pennsylvania resident who lives 5.9 miles away from the derailment and chemical detonation (their full text exchange at the bottom of this story). Durno told Siceloff the EPA detected vinyl chloride on the north side of the railroad track at the derailment site —the discovery of which contradicted prior EPA assurances that the derailment site was “completely cleared of hazardous contamination” and was “filled with clean soil.”

Durno told Siceloff that if the EPA detected a concerning level of chemicals “we direct Norfolk Southern to deal with it”; he added that after detecting the soil contaminated by vinyl chloride, the agency dug it out.

The EPA would not answer Status Coup on the date it discovered the vinyl chloride, only stating it was “earlier this spring” (sources told SC soil digging at the derailment site occurred in early May). The agency would also not answer our questions as to what the levels and concentration of vinyl chloride it detected were; how deep into the soil it was; if groundwater may have been compromised; why the agency did not notify the public; and if it had detected vinyl chloride anywhere else but didn’t notify the public. Instead, an EPA spokesperson told Status Coup the agency detected a “low-level” of vinyl chloride “nowhere near any structures” and conducted a “minor removal” of the soil that posed “no risk to public health.”

Durno echoed this, telling Siceloff that digging up the contaminated soil posed no risk of it spreading into the air. “The levels are so low any off-gassing would not be a concern—even to sensitive populations. Of course, this can’t be confirmed because EPA would not provide the levels it detected. When asked by Siceloff if the EPA had notified the public it detected vinyl chloride, Durno answered no, rationalizing that, “the VC was just above the very conservative screening level.”

Several experts Status Coup spoke to vehemently disagreed with the EPA and condemned them for not notifying residents.

Harvard-educated chemist Stephen Lester criticized the EPA’s “minimization” of digging out soil contaminated with vinyl chloride; “oversimplification” that they

detected low levels of vinyl chloride; and accused the agency of hiding critical public health threats from the public.

“The idea that it will ‘not be a concern’ to excavate the contaminated soil does not make sense; it flies in the face of what has been occurring in EP since the derailment. Many people in the town became sensitized to the chemicals released into the air and waterways by the derailment. Digging this area up will release VC into the air and will pose health risks to the people living nearby, especially to the people who have become sensitized to the chemicals. This should not be ignored or brushed lightly aside. They’re reluctant to share information and they’re hiding things they find. They should do an announcement with something like that, to share it with the public, and to share what they found in terms of the concentration. If they were to share the [contamination] numbers, other people might have a different opinion. They don’t want me, or anybody else who doesn’t think along the same lines as they do, to see these numbers because we might share a different opinion—and that creates political and community problems for them.”

Judith Zelikoff, a toxicologist at N.Y.U.’s medical school, echoed that concern.

“Vinyl chloride released to the soil is expected to volatilize or leach into groundwater. Most vinyl chloride that is spilled in soil or surface water (like lakes, ponds, and rivers) evaporates into the air quickly. VC in the air breaks down in a few days, resulting in the formation of several other chemicals including hydrochloric acid, formaldehyde, and carbon dioxide. Once it is in the environment, vinyl chloride is broken down by sunlight in a few days and changed into these other chemicals.”

Renowned environmental activist **Erin Brockovich** concurred that digging out the vinyl chloride posed a risk to nearby residents. “VC is dangerous—which is why they were aerating the streams,” Brockovich told Status Coup. She added that the EPA’s “silence is their response,” referring to the agency not notifying residents after it detected the vinyl chloride and not providing specifics about the quantity that was found.

Lesley Pacey, an environmental investigator with the Governmental Accountability Project, denounced the agency.

“The EPA has a duty to protect public health and a duty to warn residents of potential health threats. The moment EPA found the vinyl chloride, they should have alerted the public. And now that the information has leaked out, it’s time to come clean about all the details of the vinyl chloride discovery and remediation.”

According to the National Cancer Institute, exposure to vinyl chloride poses an “increased risk of a rare form of liver cancer (hepatic angiosarcoma), as well as primary liver cancer (hepatocellular carcinoma), brain and lung cancers, lymphoma, and leukemia). Beyond the direct threat of vinyl chloride exposure, when it’s burned, it produces carbon monoxide, hydrogen chloride, carbon dioxide, and phosgene—the latter being a chemical weapon banned from use in war after World War 1.

Zelikoff stressed the importance of knowing what the levels of vinyl chloride the EPA detected were. “THE DOSE MAKES THE POISON,” she said. She also emphasized she had “great concern about the phosgene that was released during the train explosion.”

[Want more investigative reporting on East Palestine and other stories the corporate media is COVERING UP? SUPPORT Status Coup as a member for as low as \$5-10 bucks a month to help fund our investigative and ON-THE-GROUND reporting in East Palestine]

Lester, the Science Director at Center for Health, Environment, highlighted the need to know how deep in the soil vinyl chloride was detected given that changes in weather can affect the movement—upward into the air or downward into groundwater—of the toxicant. Lester found it troubling that vinyl chloride was detected in East Palestine over a year after the derailment and chemical detonation—cautioning it likely meant the area it was detected has “likely been leaking vinyl chloride into the air and groundwater since the derailment.”

Since the derailment and chemical detonation, East Palestine residents, and nearby Pennsylvania residents, have developed serious ongoing health issues. Through six reporting trips to East Palestine, Status Coup has been made aware of a variety of health problems residents are experiencing. The following are just some of what we've been told:

- Seizures and strokes
- Bloody noses, blood in urine, bloody stool
- Headaches, dizziness, feelings of deliriousness, brain fog, memory loss, cognitive issues
- Nausea, diarrhea, vomiting
- Body tingling
- Burning eyes, burning nose, burning scalp
- Severe fatigue
- Depression, anxiety, PTSD
- Changes in women's menstrual cycles

Some have been diagnosed with cancers; Wayne O'Connell, a Pennsylvania resident who lived eight minutes from the derailment and detonation, developed breast cancer—rare in men—leading him to undergo a double mastectomy. Far less serious: in my first reporting trip to East Palestine in April, I developed a splitting headache, feelings of deliriousness, and pressure under my eyes while conducting interviews inside a home and outside on a residents' front porch (I don't normally suffer from any of these ailments)

Robert Kroutil, an EPA contractor—who recently became a whistleblower after revealing the EPA’s alarmingly delayed reaction to the East Palestine disaster—criticized the agency for not notifying the public after it detected vinyl chloride in soil. “They have an absolute duty to warn residents of impending actions that might threaten the public health. I am extremely worried about the transparency of their actions for the chemical vapor monitoring required to alert the public to the threat and presence of a chemical exposure.”

Lester, an expert who’s been fighting against environmental contamination dating back to Love Canal in the 1970s, said it was “extraordinary” to find a pocket of vinyl chloride over a year after the derailment and chemical detonation. “VC is highly volatile and some of it will dissolve in the water (groundwater), so you would not expect to still find it. The initial concentration must have been substantial. There very likely may be other pockets similar to the one they found.”

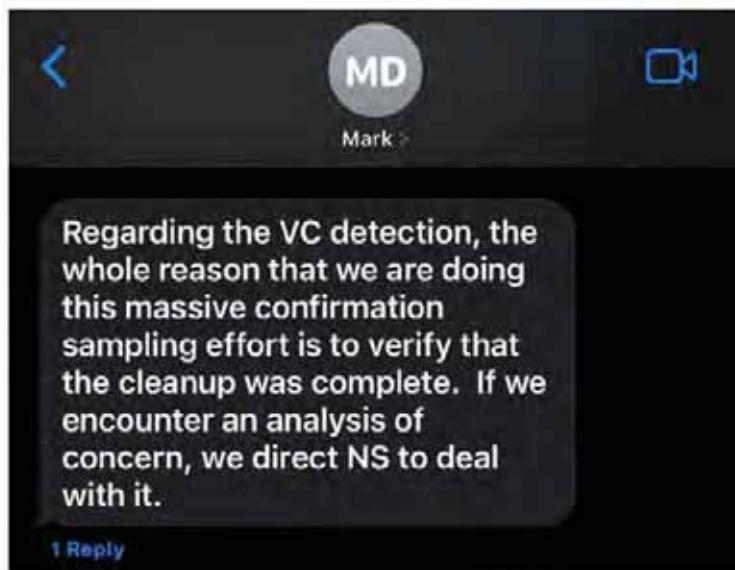
Chase Kinder, an East Palestine resident for 30 years with degrees in chemistry and biology, told Status Coup the EPA was “100 percent bullshitting the people...these are legacy chemicals that don’t go away.”

Durno told Siceloff that the EPA did not detect vinyl chloride in the air after digging it out. But experts have questioned the EPA’s air testing, noting that the agency has not been using the proper equipment to test for vinyl chloride and other toxicants in the air following the derailment and detonation (Durno himself acknowledged this soon after the derailment).

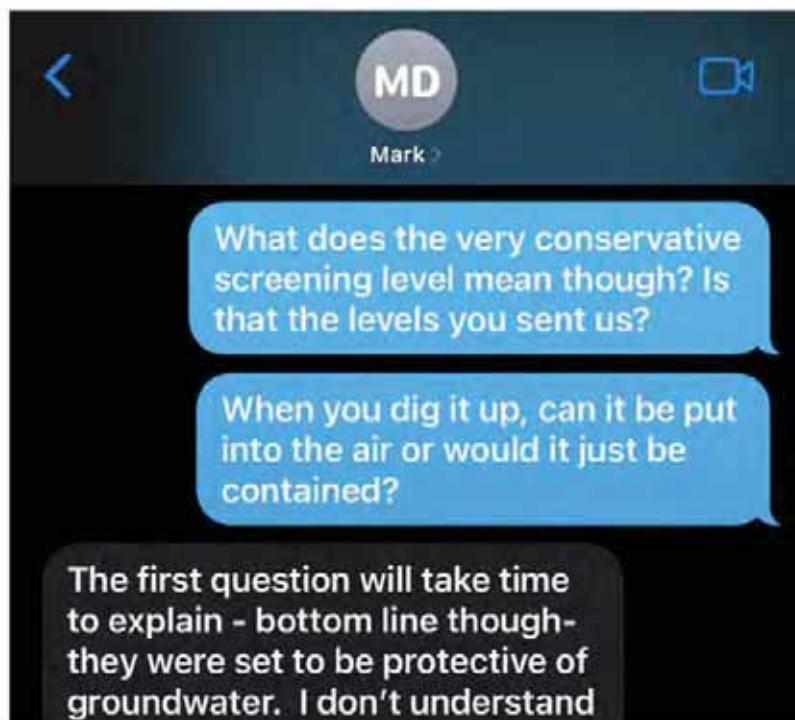
Lester also noted that the EPA’s recent detection of vinyl chloride casts further doubt on the CDC’s decision not to test residents for vinyl chloride in the aftermath of the derailment and chemical detonation. As Status Coup broke in 2023, the CDC was advising doctors in East Palestine not to test residents for vinyl chloride, claiming it passed through the human body after 24 hours and would not be detectable afterwards.

"Their statement about VC in the body refers to the body metabolizing the VC, but that only holds if the person is no longer exposed to VC," Lester said, noting that the recent detection of vinyl chloride shows that residents are still being exposed to the toxicant.

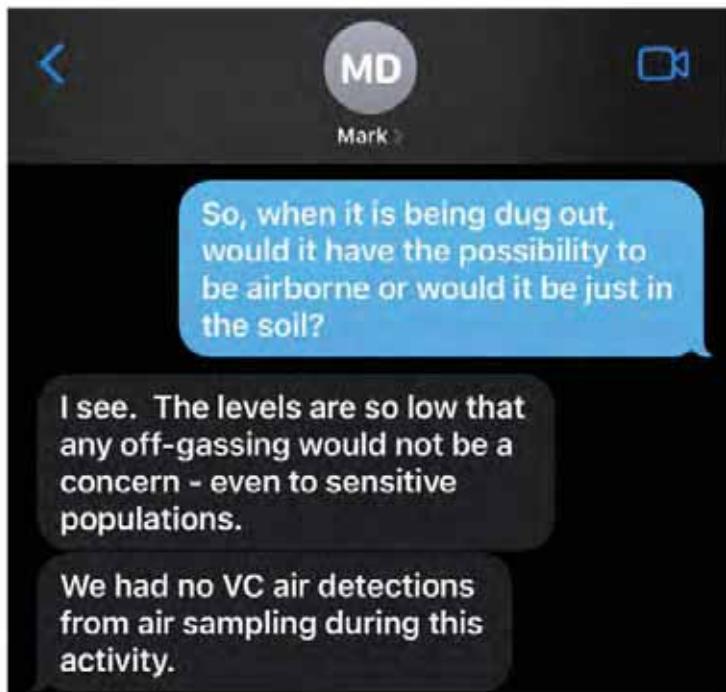
The text messages from May 20 between EPA's Mark Durno and PA resident Christina Siceloff:



Also - you may want to let your folks know that the VC detection (and dig out) was on the north side of the tracks (not at CeramFab. All has been good over there to date.



the second question.



Want more investigative reporting on East Palestine and other stories the corporate media is COVERING UP? SUPPORT Status Coup as a member for as low as \$5-10 bucks a month to help fund our investigative and ON-THE-GROUND reporting in East Palestine



12 Likes · 4 Restacks

3 Comments



Write a comment...



Teresa Barnes-Matych Jun 11

They can't "Find it" because they don't Test for it. Those poor residents will eventually suffer from Terrible Health Conditions. Every thing about that "accident" was Criminal.

EXCLUSIVE: EPA Hid Discovery of Toxic Vinyl Chloride in East Pale...

<https://statuscoup.substack.com/p/exclusive-epa-hid-discovery-of-toxic>

LIKE (2) REPLY SHARE

...



Kat Taylor Jun 11

For this to be permitted without any accountability or restitution for the residents is appalling! That this story had dropped and no one else is covering it is shameful. This looks like all the people will have to die horrible deaths from chemical exposure then the data may be tracked seems to be the only way for this to come out.

LIKE (1) REPLY SHARE

...

1 more comment...

EXHIBIT 45



June 12, 2024

Dear Ms Graham, Mr. Katz, Ms Conroy, and Mr. Morgan,

We are writing in regard to the East Palestine, OH and surrounding impacted areas class action that you are acting as lead counsel for. We feel like making residents rush to make choices about a huge decision is not in the best interest of the community. It is unfair and unreasonable to think residents can make such a major decision without complete information. A decision of this magnitude should be an informed decision.

Thus far, questions being asked by residents have not been answered clearly. It seems every attorney involved, and the newly established assistance center, has different answers to important questions. Without clear answers, it's impossible to make the decision to opt in or opt out of the lawsuit.

Residents deserve clarification. Some questions being expressed by residents include:

- Why are reimbursements for lodging during relocation being deducted from settlements?
 - The “other expenses” paid make sense since they were distributed in an unfair manner.
 - Residents out of their homes had no choice of how to spend the money reimbursed for housing. We were forced to stay in overpriced Airbnb or hotels.
 - Residents would have rather been home if not for the contamination.
- Why are payments being made “per household” instead of per person?
 - Some residents that resided together at the time of the derailment no longer associate with residents they lived with during the derailment.
 - What happens if household does not agree on the decision to opt in or out
 - Dividing the amount per household lowers the amount residents receive.
 - What happens if two households reside in one home?
 - What happens if you have multiple homes?
- Are permanent relocation expenses factored into the settlement?
 - Residential?
 - Business?
- How are residual effects on finances accounted for?
 - Residential?
 - Business?



- Does the settlement count as income? Will it have an impact on:
 - SNAP benefits?
 - Social Security?
 - Disability?
 - Medicaid/care?
 - Or any other type of assistance?
- Does taking the settlement void minors rights to sue on their own after 18 years of age?
 - Residents do not know long term health impacts of minors.
 - If a person was a minor at the time of the derailment and now they are 18, can they sign for themselves?
- Will there be additional attorney fees taken after the fees allotted to attorneys?
 - If so what %
 - How many attorneys are involved in total
 - What is the average take home pay from the settlement for each attorney
- Why are residents being asked to give up their rights to sue government officials/agencies?
 - Norfolk Southern is a corporation.
 - What is their interest in protecting Government agencies?
- How was the 20-mile radius determined?
 - What is the address being used as ground zero
 - Is it 20 miles as the crow flies?
 - Is the radius based on scientific information?
- Why are current issues not addressed?
 - Residents with health issues do not have access to a toxicologist.
 - Residential property has not been tested.
 - Homes have not been hazmat cleaned
 - A risk assessment has never been done by the EPA
- Why is the evidence not being released
 - Test results conducted by attorneys (Stephen Petty)
 - Depositions and discovery
- What evidence was the settlement based on?
 - Attorneys did not collect evidence from residents
 - Did you rely on EPA data?
 - Did you rely on NS contractors for environmental quality information?
- Why is the case being settled now?
 - The NTSB final report is still pending.
 - Creeks are still heavily contaminated.
 - Residents are still actively being exposed
 - The EPA is still finding pockets of vinyl chloride and taking soil out



- Will residents have a calculation of their final payment before they agree to opt in or out?
 - What factors are being considered?
- Why only \$10,000 for health monitoring?
 - This does not provide for treatment of diagnosis. How do we cover that?
 - How are those not in the area anymore accounted for?
- Why are renters being forced to give 10% to their landlords?
 - Wouldn't the claim for damage to property already be accounted for in their settlement?
 - What should residents do if they received papers in the mail with a past tenant's name?
- Why are there no punitive damages?
 - Residents want JUSTICE AND ACCOUNTABILITY
- Who qualifies for personal injury?
 - Do you need medical documentation?
 - Why does this end at 10 miles?
 - What about pre-existing conditions that are worsening due to the chemical exposure of unknown combinations of chemicals?
- If you opt out, can you file an individual lawsuit?
- How many plaintiffs are included in the settlement?
 - Households?
 - Residents?
 - Businesses?

The fear is that residents will not even be left with enough money to have proper testing of their homes let alone relocate to an environment in which they feel is safe. Residents will not have enough money to cover the costs of cancer or other medical care in the future. Residents have zero security for their children and their future health needs.

We need answers, we need security for future medical needs, we need to have more time to make informed decisions. ***The opt out date of July 1, 2024 is unfair and unreasonable.*** It does not leave enough time to acquire the general settlement information needed, let alone enough time for residents to evaluate their personal situations. We are requesting you provide answers to our very important questions and extend the decision deadline by June 19, 2024.

Thank you,



Jami Wallace
East Palestine, OH
Unity Council, President

Sherri Mackenstein
Beaver County, PA
Unity Council

Candice DeSanzo
East Palestine, OH
Unity Council

Daren Gamble
East Palestine, OH
Unity Council

Christopher Wallace
East Palestine, OH
Unity Council

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Beaver County, PA

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Beaver County, PA

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Beaver Falls, PA

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Calcutta, OH

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Columbiana, OH

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Darlington Twp. PA

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East Liverpool, OH

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East Palestine, OH

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East Palestine, OH



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East Palestine, OH



[REDACTED]
East Palestine, OH



[REDACTED]
East Palestine, OH

[REDACTED]
Enon Valley, PA

[REDACTED]
Enon Valley, PA

[REDACTED]
Enon Valley, PA

[REDACTED]
Enon Valley, PA



[REDACTED]
Enon Valley, PA

[REDACTED]
Unity, OH

[REDACTED]
Enon Valley, PA

[REDACTED]
Unity, OH

[REDACTED]
Lisbon, OH

[REDACTED]
Wellsville OH

[REDACTED]
Lisbon, OH

[REDACTED]
Monaca, PA

[REDACTED]
Negley, OH

[REDACTED]
Negley, OH

[REDACTED]
Negley, OH

[REDACTED]
New Waterford, OH

[REDACTED]
Newton Falls, OH

[REDACTED]
Ohioville, PA

[REDACTED]
Rochester, PA

[REDACTED]
Rogers, Ohio

EXHIBIT 46

June 13, 2024

Government Watchdog Groups Petition EPA to Warn East Palestine Residents on Dangers of Consuming Garden Produce and Wild Game

Independent Testing Concludes Harmful Chemicals, Including Dioxins, Still Present in Soil.

EAST PALESTINE, Ohio – Government Accountability Project, along with other signatories including independent scientists, toxicologists, citizens' groups, public health specialists, and medical doctors, has submitted an emergency Administrative Procedure Act (APA) [petition](#) to the U.S. Environmental Protection Agency (EPA). The petition calls for immediate action to warn residents in and around East Palestine, Ohio, about the presence of dioxins and other harmful environmental contaminants in garden produce and wild game following the Norfolk Southern Train Derailment disaster.

The petition highlights alarming findings from independent tests conducted by scientist and Government Accountability Project whistleblower client, Scott Smith. These tests, which have been corroborated by independent scientists, revealed highly elevated levels of dioxins, Semi Volatile Organic Compounds (SVOCs), and Polycyclic Aromatic Hydrocarbons (PAHs) in garden vegetables grown in East Palestine. Of particular concern are dioxin Toxic Equivalents (TEQs) as high as 440 parts per trillion (ppt) found in garlic samples, more than 12 times higher than the level at which the State of Ohio requires immediate rigorous dioxin sampling. Despite these findings, the EPA has failed to acknowledge this data or issue a warning to residents.

Furthermore, the EPA, which oversees Norfolk Southern's contractors, [knew](#) as early as February 17, 2023, that Norfolk Southern consultant Arcadis' composite soil samples at the derailment site showed dioxin Toxic Equivalency Quotients (TEQs) at 91.9, 19 times higher than the 4.8 per trillion residential screening level, the level at which the EPA typically requires immediate follow up sampling. Still, EPA denied any public health threat and less than two months later gave residents the green light to eat garden crops.

The petition demands the EPA fulfill its duty [under Comprehensive Environmental Response, Compensation, and Liability Act of 1980 \(CERCLA\)](#) to warn East Palestine residents not to consume garden produce or wild game and not garden in their soil. The duty to warn regarding environmental toxins primarily falls under the purview of the EPA, which is responsible for monitoring, regulating, and informing the public about toxins and environmental hazards.

In addition to issuing public warnings, the petition also demands comprehensive independent testing of soil and garden produce, and that EPA fulfill its duty to warn residents whenever remediation methods on land or in contaminated creeks might potentially create airborne exposure pathways. Failure to act swiftly to protect residents from dioxin exposure would constitute a grave violation of the EPA's regulatory responsibilities and pose a continued endangerment to public health.

"It is unconscionable that the EPA has not conducted its own testing on garden crops in East Palestine, nor have they sampled for dioxins in the home produce. Yet, the EPA has told residents to garden and eat home produce as usual," said Lesley Pacey, Government Accountability Project Senior Environmental Officer.

"These false assurances in the aftermath of what some toxicologists have dubbed the worst environmental disaster in five decades could result in dangerous health consequences for residents who heed the EPA's advice. Even worse, the EPA's green light to garden remains even after Scott Smith's independent dioxin data shows skyrocketing dioxin levels in East Palestine garlic. With the spring and summer planting seasons already underway, the EPA has a duty to reverse its prior stance on garden crops as well as wild game consumption until more extensive relevant independent testing is conducted."

Government Accountability Project Legal Director Tom Devine added,

"To date the EPA has appeared to honor a duty to deceive, so that business could continue as usual. Instead of conducting the proper testing, EPA held town halls, distributed seeds at garden club meetings, and posted notices on its website quelling East Palestine residents' concerns regarding their gardens and wild caught game. Meanwhile, residents of East Palestine continue to suffer from nearly 100 new symptoms since the derailment including seizures, bleeding, rashes, memory loss and more. It is time for the agency to honor its legal duty to the public by warning of life-threatening chemicals that remain in the air, soil, and water."

Contact: Andrew Harman, Government Accountability Project Communications Director

Email: andrewh@whistleblower.org

Phone: 202.926.3304

Government Accountability Project is the nation's leading whistleblower protection organization. Through litigating whistleblower cases, publicizing concerns and developing legal reforms, Government Accountability Project's mission is to protect the public interest by promoting government and corporate accountability. Founded in 1977, Government Accountability Project is a nonprofit, nonpartisan advocacy organization based in Washington, D.C.

###

EXHIBIT 47



1612 K Street NW Suite 808
Washington, DC, 20006
(202) 457-0034
whistleblower.org

Sent via Electronic Mail

June 13, 2024

U.S. Environmental Protection Agency
EPA Administrator Michael S. Regan, Mail code 1101A 1200 Pennsylvania Ave. NW
Washington, DC 20460

Regan.Michael@epa.gov

**Emergency Administrative Procedure Act (APA) Petition to Warn Residents in and Around
East Palestine Not to Eat from Their Gardens Due to Dioxin and Other Chemical
Contamination**

Dear Administrator Regan:

We, the undersigned, hereby petition the Environmental Protection Agency (EPA) pursuant to the Administrative Procedure Act (APA) (5 U.S.C. § 553 (e)) to immediately issue a rule fulfilling its duty to warn residents generally, and specifically in and around East Palestine, Ohio, about the presence of dioxins and other harmful environmental contaminants in garden produce following the Norfolk Southern Train Derailment disaster, open burn of chemicals, and remediation efforts.

Additionally, due to the release of over 100 highly toxic chemicals known to cause cancer, birth defects, multigenerational impacts and other diseases, the EPA has a duty to warn residents of the potential health threat from consuming fish and wild caught game in and around East Palestine.

Dioxin, one of the most harmful substances known to humans, poses significant health risks to humans with no safe level of intake established. Furthermore, ingestion is a particularly dangerous pathway of exposure to dioxins. Because they are so chemically stable, dioxins can persist in the environment and bioaccumulate in different organisms in an ecosystem, including bacteria, fungi, plants, insects, and larger animals including humans. In mammals, dioxins mainly accumulate in fatty tissues due to their high lipophilicity.

The signatories to this letter—including independent scientists, toxicologists, environmental organizations, and medical doctors—agree there is an urgent need to warn residents of East Palestine and neighboring communities about the potential danger of eating home garden produce harvested from their yards during the 2023 growing season.

Additionally, residents should be cautioned against preparing home garden soil for the 2024 season. Further, no hand contact or breathing of garden soil and dusts should be advised until such a time that rigorous and systematic garden soil tests prove that dioxin and PAH concentration

APA Petition to EPA re: Duty to Warn in East Palestine, Ohio
Page 1 of 13

levels in the soil are no longer a human ingestion or inhalation concern.

The EPA Should Abide by the Precautionary Principle

The precautionary principle is a concept in decision-making that suggests if an action or policy has the potential to cause harm to the public or the environment, **in the absence of scientific consensus**, the burden of proof falls on those advocating for the action or policy. In other words, **it emphasizes taking preventive action in the face of uncertainty to mitigate potential risks.**

The principle is often applied in environmental, health, and safety policymaking, particularly in situations where there may be scientific uncertainty or incomplete information about the potential impacts of a particular action or technology. **It implies that if there is a risk of serious or irreversible harm, even in the absence of scientific certainty, measures should be taken to prevent or minimize that harm.**

The precautionary principle is sometimes summarized as "better safe than sorry," advocating for erring on the side of caution when dealing with potentially harmful situations or technologies. It has been incorporated into various international agreements and policies concerning environmental protection, public health, and consumer safety.

Independent Testing Shows High Levels of Chemical Toxins

Independent tests on garden crops, soil, and surface waters in East Palestine show elevated dioxins, Semi Volatile Organic Compounds (SVOCs), and Polycyclic Aromatic Hydrocarbons (PAHs). Recently, tests conducted by Government Accountability Project whistleblower Scott Smith, which were analyzed and confirmed by independent scientists, also revealed alarming levels of dioxin congeners and polycyclic aromatic hydrocarbon (PAH) compounds in 100% of the sampled garden vegetables grown in East Palestine.¹

While Smith's garden produce testing is limited so far to a few samples, the extraordinary results warrant an immediate precautionary action by the EPA and additional testing. Specifically, dioxin Toxic Equivalents (TEQs) as high as 440 parts per trillion (ppt) have been found in garlic samples from residential gardens. This TEQ is more than 12 times higher than the State of Ohio soil cleanup remediation level of 35.8 ppt.

Smith's garden produce findings were released in the news and to community members in February 2024. This data should have triggered the EPA to conduct independent testing on garden produce and advise community members to refrain from consuming garden produce or prepare soil for future planting.

The EPA failed to acknowledge Smith's data or issue a warning to residents. Instead, EPA maintained that East Palestine residents should continue to garden as usual.²

We believe this decision to allow people to garden and eat the crops in East Palestine was premature because no government entity or paid contractor tested for dioxin in garden crops in

¹ Scott Smith, "[Summary of Soil and Crop Testing for Dioxins East Palestine](#)," February 12, 2024.

² U.S. EPA, "[Newsletter: East Palestine Train Derailment Response, 4-25-2023](#)," last updated April 23, 2024.

East Palestine. Additionally, no testing was conducted to assess the presence of many of the train derailment chemicals of concern.

Murray McBride, a soil and environmental chemist and an emeritus professor at Cornell University, three weeks after the derailment said that more tests were needed to determine whether dioxins had been deposited onto soil as a result of the chemical burn — and if so, how far they may have spread.³

The day of the evacuation order for East Palestine was lifted, February 8, 2023, Nancy Alderman, the president of Environment and Human Health Inc. (EHHI) in a letter to East Palestine residents cautioned against the EPA's assertion that it was "safe" to return home:

"... The history of environmental disasters lays out what happens in many of these cases. Government comes in and tries to calm the situation down and starts testing. However, what we have learned from Love Canal, Chernobyl, the huge oil spill in the Gulf (where people worked to clean up the oil), is that the full amount of the damage to the environment and to people's health is not known for a number of years. It takes a long time to fully understand the scope of these disasters and exactly what they have caused to people's health and to the surrounding landscape including drinking water supplies.

No one can possibly know whether it is really safe right now to live and work in the areas that were/are affected by the East Palestine train wreck. This means it is often prudent to act now rather than waiting. **In the case of East Palestine, it is known what chemicals were on the train cars that crashed, and most of those chemicals are well known enough to know their environmental and health hazards.**

In situations such as this, the advice to stay put and wait for the science makes little sense. The presumption of hazard is the only ethical conclusion to reach. With most hazardous sites and spills, the evidence is rarely available to conclude danger or safety. EPA's expression of safety seems unfounded to me. With most other sites (Superfund, RCRA, and spill areas) the only reassurance comes from long term testing of air (indoors and outside) soils, ground and drinking water, and foods. Human tissue testing is also essential to test for the suite of chemicals released. Long term medical surveillance of humans, pets, livestock is essential to reach a responsible determination of safety, and to understand the probabilities of illness causation. This situation reminds me of the political fight over the evacuation boundary surrounding the Chernobyl and Fukushima accident sites being so conflicted due to the extraordinary costs of pursuing the precautionary actions suggested above under such conditions of uncertainty."⁴

EPA Did No Testing on East Palestine Home Gardens

Despite the paradigm that only long-term studies can prove whether a chemically impacted community is safe or not, the EPA has not conducted any of its own garden crop sampling in East Palestine to warrant the agency's claims that garden produce in East Palestine is safe to consume. At the November 2023 Society of Environmental Toxicology and Chemistry

³ "Vinyl Chloride 'high mobile in soils and water.' East Palestine area farmers advised to test crop sites." Cornell Chronicle, February 15, 2023.

⁴ Nancy Alderman, Email Message Regarding East Palestine, February 8, 2023.

(SETAC) conference in Kentucky, the EPA's Diane Russell stated that only the Ohio Extension Service, but not the EPA, did any testing on East Palestine garden crops.⁵

The EPA based their public notice on East Palestine crop consumption safety data gathered by the Ohio Department of Agriculture (ODA) and the Ohio State University (OSU) College of Food, Agriculture, and Environmental Sciences.⁶ ODA and OSU announced in May 2023 that plant materials from agricultural farm sites within five miles of the East Palestine area are not contaminated with semi-volatile organic compounds (SVOCs) associated with the train derailment.

However, the samples and locations of the ODA study were not applicable to home garden crops in East Palestine.⁷ ODA collected plant tissue from 16 agricultural areas in Columbiana County in April. The samples did not include garden crops but instead focused on winter wheat, pasture grasses, malting barley, and forage covers. Additionally, the samples were not taken from residential gardens. Instead, they were taken within a five-mile radius from the train derailment site—and predominantly upwind from the prevailing toxic plume deposition patterns. Furthermore, anonymous whistleblowers report that the EPA forensic plume model was not adequately designed and that the load factors of the model were subject to criticism.

The ODA samples were analyzed for the same 26 selected SVOCs the EPA had been testing for in soil. None of the samples were analyzed for products of incomplete combustion (PICs) including dioxin congeners.⁸ Additionally, data collected as many as five miles away from the derailment site does not represent in any way the contamination found near ground zero residential gardens.

Dr. George R. Thompson, a toxicologist with more than 50 years of experience in chemical hazard assessments,⁹ stated the following regarding the garden produce:

“The burning of chemicals and products in the East Palestine train derailed cars converted this serious accident into the most hazardous toxicological event I have ever known in my 55 years as a professional and independent toxicologist. Eight chemicals in the railcars were known to cause cancer and allergies. Burning the chemicals and products in the derailed cars resulted in over 100 highly hazardous chemicals that are known to cause cancer, and numerous other diseases. Just two of the highly hazardous chemicals are known as dioxins and polycyclic aromatic hydrocarbons (PAHs). Dioxins cause cancer of the bladder, blood, breast, pancreas, colon, lung, liver, or prostate. PAHs cause cancer of the lung, skin, bladder, or scrotum. These two chemicals are both known as “forever chemicals,” since they are very long-lasting in both our bodies and the environment. They also bioaccumulate in the food chain—i.e., consumed by lower food chain items which are in turn consumed in larger quantities by higher food chain items.

⁵ Madeline Beal, Mike Nye, Diane Russell, “[EPA East Palestine Disinformation Misinformation Excerpt Crops Gardens 11-15-23](#),” Video Recording, November 15, 2023.

⁶ Ohio Department of Agriculture and The Ohio State University, [Agricultural Plant Tissue Sampling Results, East Palestine, Ohio](#), May 16, 2023.

⁷ Ibid.

⁸ Ibid.

⁹ [Curriculum Vitae](#) of Dr. Thompson (last visited May 2, 2024).

Dioxins have been identified at extremely high levels in East Palestine home-grown garlic, with levels **hundreds to thousands of times greater than detected in East Palestine produce before the derailment and fire**, or in remote Pennsylvania produce. When contaminated garlic is consumed by people, carcinogenic dioxins will be stored in their body fat, thereby resulting in long-term exposure and increased cancer risk. East Palestine gardeners need to be warned that consumption of their preserved garden produce can greatly increase their risk for development of delayed, life-threatening diseases.”¹⁰

This is not the first time the EPA failed to collect critical chemical data. The EPA has heavily relied on data provided by Norfolk Southern contractors in East Palestine to declare the environment safe. Meanwhile, whistleblower Robert Kroutil, has disclosed to the EPA Office of Inspector General that the EPA failed to deploy its best technology, the ASPECT (Airborne Spectral Photometric Environmental Collection Technology) airplane until February 6, 2023, five days after the derailment.¹¹ Mr. Kroutil, a retired EPA contractor who interpreted data for all of the aircraft’s 180 missions, noted the delay was a break from protocol as ASPECT is usually deployed within an hour and arrives at the accident site within a few hours.¹²

The delay caused the EPA to miss gathering the chemical data from the slow burn of chemicals February 3 through February 6, and the chemicals present during the subsequent massive plumes from the unnecessary February 6 detonation of five vinyl chloride train cars. Furthermore, when the aircraft deployed on February 7, the EPA ASPECT program manager instructed the aircraft operators during both flights that day to turn off the ASPECT’s chemical sensors over the contaminated creeks. Kroutil disclosed the collected data was too minimal to be conclusive, but EPA in its final report used the incomplete data from the flights to deem the vent and burn successful. The EPA Office of Inspector General is investigating the EPA ASPECT program’s actions due to Kroutil’s disclosure.

Independent Dioxin Data Disregarded

With Smith’s data and none of their own relevant data on garden crops, the EPA should have—at the very least—applied the Precautionary Principle, which calls for preventative action in the face of uncertain information about health risks¹³ as not enough information is known regarding the garden crops in and around East Palestine. Dioxin and other products of incomplete combustion (PICs) such as phosgene and hydrochloric acid were formed and other harmful chemical mixtures were released during the February 3, 2023, slow burn of vinyl chloride and subsequent February 6, 2023, detonation of the train car chemicals. Remediation methods continue to produce airborne dust and vapors, creating an ongoing third exposure event for

¹⁰ Dr. George Thompson, Written Statement to Government Accountability Project Investigator Lesley Pacey, March 29, 2024.

¹¹ [“Whistleblower: EPA Failed to Deploy Critical Airborne Technology during East Palestine Disaster.”](#) Government Accountability Project. May 14, 2024.

¹² Ibid.

¹³ University of Michigan School of Public Health Lifestage Environmental Exposures and Disease Center, “[An Ounce of Prevention... The Precautionary Principle.](#)” Environmental Health Fact Sheet, August 2012.

residents.

Moreover, the EPA knew as early as February 17, 2023 that Norfolk Southern's composite soil samples at the derailment site showed dioxin Toxic Equivalency Quotients (TEQs) as high as 19 times above the levels at which the EPA mandates immediate further testing. Still, EPA gave residents the green light to eat garden crops as early as two months after the derailment disaster. In April 2023, the EPA posted the following notice on its website:

Can I grow a garden at home and eat the produce?

*"Yes. You can continue to use your yard as you normally would. Residential soil sampling results are within typical ranges for the area, and garden plants are generally considered safe to eat. Follow normal measures like peeling carrots and root vegetables and washing leafy greens."*¹⁴

The EPA also spoke to residents in East Palestine at a town hall on April 20, 2023 during which EPA Region 5 On Scene Commander Mark Durno told residents that the EPA's **"recommendation is to continue using your properties the way you normally would."** Durno further told residents at this town hall that a phytoremediation expert from EPA met with the local garden club. Durno said, "He told us the chemicals that we are dealing with, if they were a problem, do not readily uptake into those plants -so even if we did have a problem, he does not believe that you should not garden or farm. That was his piece of advice."¹⁵

Dioxin uptake in plants is a complex process that can occur through various pathways. One of the ways that dioxins can enter plants is through the soil, according to multiple studies.¹⁶

Another pathway for dioxin uptake in plants is through the atmosphere. Dioxins present in the air can be absorbed by plant leaves.¹⁷ However, the mechanisms of foliar uptake of potentially toxic elements (PTEs) from the atmosphere and their translocation by plant leaves are not yet fully understood.¹⁸

In a study on foliar uptake of PTEs in garlic chive leaves, researchers used carboxylic acid functionalized water soluble CdSe/ZnS quantum dot nanoparticles (QD NPs) as an experimental particle model of PTEs. They found that QD NPs deposited on garlic chive leaves penetrated the plant leaves and were absorbed into mesophyll cells and phloem vessels. The results also showed that QD NPs penetrated through the leaves and translocated in the direction of the stem. It is important to note that contamination of vegetables due to foliar uptake of atmospheric toxic elements could pose severe health risks.^{19,20}

¹⁴ U.S. EPA, "[Can I grow a garden at home and eat the produce?](#)," East Palestine, Ohio Train Derailment, last updated April 9, 2024.

¹⁵ Mark Durno, [EPA Mark Durno Dioxins Crops Gardens Testing 4-20-23](#), Town Hall video, April 20, 2023.

¹⁶ U.S. EPA, "[Literature on the Uptake by Plants of Polychlorinated Dioxins \(PCDDs\) and Dibenzofurans \(PCDFs\)](#)."

¹⁷ Seo, Eunseok, Seonghan Kim, Jiwon Park, Heejin Lim, Nami Ha, Jun Lim, Jae Hong Lim, Hyun Jin Park, Ki Hean Kim, and Sang Joon Lee. 2021. [Review of Foliar Uptake of the Potentially Toxic Elements in Garlic Chive Leaves](#). *Frontiers in Environmental Science*. Sec. Toxicology, Pollution and the Environment. October 14, 2021.

¹⁸ Ibid.

¹⁹ Ibid.

²⁰ DeJuliannie Ashley, Pecou Aaliyah, Flynt Alison, "[Evaluating Plant Uptake of Chemical Contaminants in Crops Grown Near Urban Gardening Sites for Human Health Risk Assessment](#)" EPA.

EPA Knew Early on Dioxin Levels Were Elevated; Norfolk Southern Dioxin Sampling Plan Flawed

On May 1, 2023, the EPA released preliminary findings of Norfolk Southern's soil sampling plan, announcing the results showed little soil contamination from the derailment and subsequent burn.²¹ However, railroad contractor Arcadis' plan and findings drew sharp criticism from dioxin expert Dr. Stephen Lester, who said the EPA's dioxin data, which is Arcadis' data, "is not worth the paper it was written on."²² Lester analyzed the sampling plan and resulting data for Center for Health and Environmental Justice (CHEJ). Lester said that the EPA has failed to answer residents' questions about "sampling locations, collection, measurement and analysis" of Norfolk Southern's dioxin soil sampling.²³

Lester stated, "EPA used a nonstandard approach for selecting sample locations that was uncharacteristic, unscientific, and unprofessional." Moreover, he asked the EPA in his analysis of Norfolk Southern's soil sampling plan, "why was an objective sampling approach (such as a grid plan or concentric circle plan) to get unbiased sampling not used in this situation?"²⁴

Further, on the anniversary of the derailment in February, Lester told an audience, "... The first round of testing of some 130 samples or so, we've looked at that (Norfolk Southern's dioxin soil sampling plan) very carefully and what we realized is the way they made decisions about where to test and how they collected their samples enormously influenced the results. And one of the things I've learned over all these years looking at all this data, is that the data is only as good as how the samples are collected. If it's garbage in, you get garbage out. And what EPA did, the first thing they did was they said to the contractor, 'You can do whatever you want.' And the contractor said, 'Well, we're going to decide where to take our samples by walking the site and looking for evidence of contamination. If we see it, we'll take a sample there.' Well, in all my years of doing this work, I've never seen EPA give anybody carte blanche like that. It's so subjective."²⁵

Then in July 2023, when Smith's soil samples, gathered on Taggart Street near the derailment site, showed elevated soil TEQ dioxin and furan levels in excess of 600,000 parts per trillion, Durno continued to be dismissive. He told News Nation that their own test results before April 18, 2023 showed 124 ppt.²⁶ Smith said the EPA had not considered recontamination through the remediation process which stirs up dust, creating an ongoing threat of exposure.²⁷ Norfolk Southern's contractors tested the waste at the derailment site on February 17, 2023, and found

²¹ Julie Grant, "[EPA says soil in East Palestine looks 'really good,' but some see a disconnect with their health.](#)" *Ideastream Public Media*, May 1, 2023.

²² Stephen Lester, "[East Palestine, Ohio - Stephen Lester, UC San Diego, Rick Tsai](#)," *Together in Unity Event*, video, February 5, 2024.

²³ People's Action Institute, Center for Health, Environment & Justice, "[Re: EPA's Dioxin Testing in East Palestine, OH Conducted March-April, 2023.](#)" Letter to Jami Wallace/Unity Council for the East Palestine Train Derailment, October 17, 2023.

²⁴ *Ibid.*

²⁵ Stephen Lester, "[East Palestine, Ohio - Stephen Lester, UC San Diego, Rick Tsai](#)," *Together in Unity Event*, video, February 5, 2024.

²⁶ "[East Palestine dioxins thousands of times higher than control: Scientist](#)," *NewsNation*, July 19, 2023.

²⁷ *Ibid.*

dioxins TEQs at 19 times their own levels at which EPA mandates further testing.²⁸ But they did not test the soil in and around the community until residents, lawmakers, and scientists raised concerns. It remains unclear from the resulting report which locations were sampled and why.²⁹

After he was questioned about Smith's dioxin soil sampling data, Durno told a reporter that the soil was so safe that he just ate a tomato from a garden on the Brushville Hardware property where Smith found the highest TEQ levels of soil dioxins in East Palestine.³⁰

The concentration of dioxins and furans at Brushville Hardware was found to be 604,064 ppt – or 604 parts per billion (ppb) which equals or exceeds dioxin levels in Times Beach, Missouri, where in 1983 residents were told to evacuate permanently due to extreme dioxin contamination.³¹

The action in Times Beach was necessary after the Centers for Disease Control (CDC) completed analysis of extensive soil sampling in the area and advised that the hazard posed by dioxin contamination is a continuing threat to the health of citizens in the community. Laboratory analysis of post-flood sampling along roadways (including the shoulders and ditches), houses and yards in Times Beach showed that of 255 samples, levels of dioxin in a few yards and in one home show levels of greater than 1 ppb and less than 5 ppb. Sample locations in streets, on shoulders and in ditches show levels from nondetectable up to 100 ppb.³²

However, in East Palestine, the EPA refused to test residents' property or gardens for dioxins. Still, the agency continued to assure residents that their soil and produce were safe. Then in October 2023, the EPA once again gave East Palestine residents the green light to garden as they normally would.³³

Fish and Wild Game

Additionally, the Precautionary Principle should be applied when it comes to consumption of wild game and fish in East Palestine due to ongoing creek contamination. The release of chemical mixtures has not been evaluated, and questions remain about the toxins' impact on wildlife.

To date, a scant number of animals have been necropsied for train derailment chemicals and none of the animals have been sampled for dioxin or other products of incomplete combustion.

Immediately after the derailment and open burn, a massive aquatic animal kill occurred.³⁴

²⁸ Government Accountability Project, "[Over 1,500 Pages of East Palestine Dioxin-Related Testing Found Buried on EPA Website](#)," *Government Accountability Project*, February 1, 2024.

²⁹ People's Action Institute, Center for Health, Environment & Justice, "[Re: EPA's Dioxin Testing in East Palestine, OH Conducted March-April, 2023](#)," Letter to Jami Wallace/Unity Council for the East Palestine Train Derailment, October 17, 2023.

³⁰ Paul Van Osdol, "[East Palestine: EPA official raised concerns about dioxin testing delay](#)," *WTAE*, July 26, 2023.

³¹ U.S. EPA, "[1983 Press Release: Joint Federal/State Action Taken to Relocate Times Beach Residents](#)," *EPA's Web Archive*, February 22, 1983 (last visited May 7, 2024).

³² *Ibid.*

³³ Kelly Kennedy, "[East Palestine Residents Given Green Light to Garden, EPA Releases Soil Results on Heels of Lawsuits](#)," *Cleveland 19*, October 3, 2023.

³⁴ Dino Grandoni and Joyce Koh, "[Near Ohio train derailment, more than 43,000 aquatic animals are dead](#)," *The Washington Post*, February 23, 2023.

Natural resource officials estimate that more than 43,000 animals died in and around East Palestine. Specifically, they estimated that 38,222 minnows and approximately 5,550 other species, including other fish, crayfish, and amphibians, were killed during the derailment.³⁵

Since then, independent tests conducted by Smith revealed elevated dioxins in the creeks as well as elevated PAHs. Additionally, Three Rivers Waterkeeper released data in December from its testing of Sulphur Run in November 2023 showing high levels of contaminants.³⁶

EPA recently acknowledged the presence of oily sheen in Sulphur Run and Leslie Run creeks and announced a plan to remediate.³⁷

Residents reported that household pets as well as farm animals such as chickens, rabbits, and foxes have dropped dead after the disaster. Wildlife as far as 20 miles from the derailment have died.³⁸ The creeks are a drinking water source for deer and other wild animals.

In the wake of the derailment, East Palestine resident [REDACTED] said her horses, dog, and cats fell ill with gastrointestinal issues, face swelling, and lethargy after the derailment. "I went out to the stall in the morning, and [my horse] was covered in diarrhea from rolling in the stall," [REDACTED] said. "He had dried sweat on his neck and chest, and he just would not move." The veterinarian said the horse's symptoms were "environmental," according to [REDACTED].³⁹ Another resident, [REDACTED] said seven of his sheep mysteriously fell over dead after the derailment.⁴⁰

Multiple East Palestine residents have reported that they cannot find a single lab to test a number of frozen animal carcasses they have stored for necropsy since the derailment. In March 2023, the Ohio Department of Agriculture (ODA) said one calf and 10 wildlife species were tested after their deaths and none of the deaths were "chemical related" despite reports from residents of numerous unusual animal deaths.⁴¹ Meat inspectors were also called multiple times into the state for potential concerns in Trumbull, Mahoning, Stark, Portage and Columbiana counties.⁴²

The ODA said that meat inspectors called in veterinarians 35 times in the month following the derailment. "In five cases, the carcasses were kicked out and none of those were, again, determined from the chemical side of any concerns that way. There was nothing chemical related that we could link to, a lot of different things, but nothing that we could connect with what has occurred here," ODA Director Brian Baldridge said. "And that's strictly the facts with what has come into our lab."⁴³

However, there was only a limited number of domestic, wild and livestock animals tested, and the tests did not look for dioxins. It is unclear from open-source news articles which train

³⁵ Paige Bennett, "[East Palestine, Ohio, train derailment killed 43,000 animals, fish](#)," *USA Today*, February 24, 2023.

³⁶ Three Rivers Waterkeeper, "[Water and Sediment Sampling in Sulphur Run](#)," November 20, 2023.

³⁷ U.S. EPA/EPA Regions, "[East Palestine Train Derailment Response - Stream Cleaning](#)," EPA video, March 14, 2024

³⁸ Kelly Byer, "[Lawsuit: Fish and animals dying as far as 20 miles away from East Palestine](#)," *The Repository*, *CantonRep.com*, February 17, 2023.

³⁹ Katie Smith, "[East Palestine residents say train derailment made pets sick](#)," *NewsNation*, May 18, 2023.

⁴⁰ *Ibid.*

⁴¹ Abigail Bottar, Kennedy Goliham, "[No evidence East Palestine agriculture system was impacted by train derailment, officials say](#)," *Ideastream Public Media*, March 9, 2023.

⁴² *Ibid.*

⁴³ *Ibid.*

derailment chemicals were involved in the screenings of the deceased animals studied. When Government Accountability Project requested more information from the ODA's Ohio Animal Disease Diagnostic Laboratory, on April 5, 2024, scientist Melanie Prarat Koscielny, the lab's operations manager said that her lab did test animals that died after the derailment, but that Government Accountability Project would have to file a public records request with the ODA legal division for any additional information. Even so, the EPA cleared residents of East Palestine to eat wild game meat harvested locally with this advisory on its website on October 3, 2023:

Hunting season is underway, is it ok to eat wild game meat harvested from the local area?

"There is no evidence to indicate there are any human health risks resulting from the train derailment that would limit eating wild game. To learn about other advisories or notices unrelated to the incident, contact the agency listed on your hunting license."⁴⁴

EPA's Duty to Warn

The duty to warn regarding environmental toxins primarily falls under the purview of the EPA, which is responsible for monitoring, regulating, and informing the public about toxins and environmental hazards. The EPA's responsibilities⁴⁵ include:

1. Regulatory Oversight: The EPA establishes regulations and standards for the management and disposal of toxic substances. These regulations often include requirements for labeling, handling, and reporting of hazardous materials to ensure that the public and environmental safety are protected.⁴⁶
2. Risk Assessment and Communication: The EPA conducts risk assessments to evaluate the potential health and environmental risks associated with various toxins. Based on these assessments, the EPA communicates information to the public, policymakers, and relevant stakeholders about the risks posed by specific toxins and the necessary precautions to mitigate exposure.
3. Emergency Response: In the event of environmental emergencies such as chemical spills or releases, the EPA coordinates with other federal agencies, state and local governments, and private organizations to assess the situation, contain the hazard, and inform the public about any potential risks or precautions to take.⁴⁷
4. Public Education and Outreach: The EPA engages in public education and outreach efforts to raise awareness about environmental toxins and empower individuals and communities to take actions to reduce their exposure. This may include providing educational materials, conducting

⁴⁴ U.S. EPA, "[Hunting season is underway, is it ok to eat wild game meat harvested from the local area?](#)," East Palestine, Ohio Derailment, last updated October 3, 2023.

⁴⁵ U.S. EPA Enforcement, "[Using the Imminent Hazard, Enforcement and Emergency Response Authorities in CERCLA and other Statutes](#)," last updated October 17, 2023, citing Federal Register, "[Guidelines for Using the Imminent Hazard, Enforcement and Emergency Response Authorities of Superfund and Other Statutes](#)," 47 Fed. Reg., No. 93, p. 20664, May 13, 1982.

⁴⁶ U.S. EPA Laws and Regulations, <https://www.epa.gov/laws-regulations>

⁴⁷ U.S. EPA Emergency Response, <https://www.epa.gov/emergency-response>

outreach events, and maintaining informational resources on their website.⁴⁸

5. Enforcement of Regulations: The EPA enforces regulations related to environmental toxins through inspections, enforcement actions, and penalties for non-compliance. By holding polluters accountable, the EPA aims to deter illegal activities and protect public health and the environment.⁴⁹

6. Scientific Integrity: The EPA applies a framework to ensure scientific integrity throughout the EPA and promote scientific and ethical standards, including quality standards; communications with the public; the use of peer review and advisory committees; and professional development.⁵⁰

Overall, the EPA plays a critical role in fulfilling the duty to warn about environmental toxins by regulating their use, assessing their risks, communicating with the public, and taking enforcement actions as necessary to ensure environmental protection and public health.

The primary statute that mandates the Environmental Protection Agency's (EPA) duty to warn about environmental toxins is the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), also known as the Superfund law.⁵¹ CERCLA was enacted by the U.S. Congress in 1980 and provides the EPA with the authority to respond to releases or threatened releases of hazardous substances into the environment.

Under CERCLA, the EPA is responsible for:

1. Identifying hazardous waste sites.
2. Assessing the risks posed by these sites to public health and the environment.
3. Taking action to clean up or mitigate the contamination.
4. Informing and involving the public in the decision-making process.

Additionally, the Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986,⁵² which is an amendment to CERCLA, requires certain industries to report annually on the release of hazardous substances to the environment. This information is made available to the public and local emergency planning committees to aid in emergency response planning and public awareness.

⁴⁸ U.S. EPA Environmental Topics, <https://www.epa.gov/environmental-topics/chemicals-pesticides-and-toxics-topics>

⁴⁹ U.S. EPA Enforcement, <https://www.epa.gov/enforcement>; U.S. EPA Compliance, <https://www.epa.gov/compliance>

⁵⁰ U.S. EPA Scientific Integrity Policy, https://www.epa.gov/system/files/documents/2023-12/scientific_integrity_policy_2012_accessible.pdf (last updated February 16, 2024). EPA is currently updating its Scientific Integrity Policy to conform with the Office of Science and Technology Policy (OSTP) Framework for Federal Scientific Integrity Policy and Practice issued January 2023, and expects to release its final policy in 2024. <https://www.epa.gov/scientific-integrity/building-epas-updated-scientific-integrity-policy>.

⁵¹ 42 U.S.C. § 9601 et seq. (1986). See also <https://www.epa.gov/enforcement/comprehensive-environmental-response-compensation-and-liability-act-cercla-and-federal>.

⁵² 42 U.S.C. §11001 et seq. (1986). See also <https://www.epa.gov/epcra/what-epcra>.

While CERCLA and EPCRA are the primary statutes mandating the EPA's duty to warn about environmental toxins, other environmental laws and regulations also contribute to the agency's responsibilities in this regard. These include the Toxic Substances Control Act (TSCA),⁵³ the Clean Air Act (CAA),⁵⁴ the Clean Water Act (CWA)⁵⁵, and various state and local environmental laws.

The EPA's failure to conduct its own independent testing of the soil and garden produce in East Palestine following the train derailment and subsequent vent and burn chemical release - coupled with its continued advisory grounded in knowingly false statements to consume untested garden produce and animals - constitutes a breach of its duty to protect public health and safety.

Other remediation activities near the derailment site generated airborne contaminants, both vapors and associated micro-particulate. Specifically, a second public warning notice concerns air knifing and sparging, and recent creek sediment "washing" that contributed to ambient air emission violations caused by Norfolk Southern contractors overseen by EPA and which recently was halted due to chemicals being released downstream.

During the air knifing operations over the last year, various VOCS were emitted from more than 20 locations within the grossly contaminated sediments and water columns of Sulfur and Leslie runs in a possible violation of the Clean Air Act. Just this week, Status Coup released a report showing that EPA found vinyl chloride at the train derailment site this spring, but they did not inform the public.⁵⁶

EPA has a clear duty to warn residents of these potential health threats and staying silent puts community members in harm's way.

In light of the urgent health risks posed by dioxin contamination in garden crops, we petition the EPA to issue a rule with the following provisions:

1. Immediately issue a public warning advising residents in and around East Palestine not to consume produce from their gardens or prepare soil for future planting until further notice.
2. Immediately issue a public warning advising residents in and around East Palestine to not consume fish or farm animals or wild caught game until further notice.
3. Conduct comprehensive timely and ongoing independent testing of soil and garden produce in the affected area to determine the extent of dioxin and PAH contamination.

⁵³ 15 U.S.C. §2601 et seq. (1976). See also https://19january2021snapshot.epa.gov/laws-regulations/summary-toxic-substances-control-act_.html.

⁵⁴ 42 U.S.C. §7401 et seq. (1970). See also https://19january2021snapshot.epa.gov/laws-regulations/summary-clean-air-act_.html.

⁵⁵ 33 U.S.C. §1251 et seq. (1972). See also https://19january2021snapshot.epa.gov/laws-regulations/summary-clean-water-act_.html.

⁵⁶ Chariton, Jordan. 2024. "EXCLUSIVE: EPA Hid Discovery of Toxic Vinyl Chloride in East Palestine, Won't Disclose Levels They Detected." Status Coup News. June 11, 2024. <https://statuscoup.substack.com/p/exclusive-epa-hid-discovery-of-toxic>.

4. Implement remediation measures to mitigate the risks posed by contaminated soil and garden produce to public health.
5. Warn residents prior to air knifing, sparging and sediment "washing" activities in contaminated creeks.
6. Immediately warn residents when dangerous chemicals are detected in the community.
7. Establish standards to provide mandatory warnings for affected communities in future accidents.

Failure to take prompt and decisive action to protect residents from dioxin exposure would constitute a grave violation of the EPA's regulatory responsibilities under CERCLA and a continued endangerment to public health.

Thank you for your attention to this matter. We request a timely response and action on this petition to ensure the safety and well-being of the residents of East Palestine and surrounding areas. Due to this emergency health threat, please respond immediately to this petition.

Sincerely,

Government Accountability Project

Scott Smith, Independent Scientist and Government Accountability Project whistleblower client

Dr. Claudia S. Miller, Professor of Allergy/Immunology and Environmental Health at University of Texas

Dr. George Thompson, Toxicologist, President/CEO Chemical Compliance Systems, Inc.

Nancy Alderman, President of Environment and Human Health, Inc., a non-profit of physicians and public health professionals dedicated to protecting human health from environmental harms

Dr. Rick Tsai, East Palestine Chiropractor, Holistic Doctor and Creek Ranger

Jami Rae Wallace, President of the Unity Council for the East Palestine Train Derailment

EXHIBIT 48

MORNING JOURNAL

Ohio Attorney General hears from East Palestine residents



Ohio Attorney General Dave Yost held a community discussion at the East Palestine High School on Saturday to hear from residents impacted by last year's train derailment and to get comments from the public on the federal government's pending settlement with Norfolk Southern regarding the rail disaster (Photo by Stephanie Elverd)

EAST PALESTINE — Ohio Attorney General Dave Yost pulled no punches during a town hall held at East Palestine High School on Saturday to discuss the pending settlement between the federal

government and Norfolk Southern.

“Candidly, I am a little irritated with the federal government moving so quickly on their side of this,” Yost said. “They are settling the lion’s share of these claims and leaving me with a little less leverage.”

Yost explained that while the State of Ohio’s lawsuit against Norfolk Southern remains, *“many of the claims Ohio brought against the railroad the federal government took over”* as is its right under federal law. In May, the U.S. Department of Justice announced that a \$310 million settlement had been reached between Norfolk Southern and the federal U.S. Environmental Protection Agency. Yost immediately criticized the decision to settle without the final findings from the National Transportation Safety Board. He reiterated those concerns during Saturday’s community discussion.

“The investigators still haven’t put out their report yet about why this happened, and I don’t for the life of me know why they negotiated a settlement before they had seen the NTSB report,” Yost said. “I certainly wasn’t interested in doing that.”

The NTSB will vote on the final findings, probable cause, and recommendations during a public infield hearing in East Palestine on June 25. Without the NTSB’s final report, Yost said the State of Ohio *“isn’t interested in settling”*. Yost also said that he asked for an extension on the comment period regarding the federal settlement. The initial period was to expire on July 1. The deadline is now Aug. 2.

The community discussion was meant to gauge the public’s reaction to the U.S. government’s settlement, direct whether or not Ohio will object to it in court and to help steer any negotiation the state may have with the railroad concerning its own lawsuit.

Yost also used the discussion as an opportunity to hear the community’s opinion of the \$600 million class-action settlement, as well as the challenges those impacted by the rail disaster have and continue to face.

“We are here today for you to tell us what the federal government missed, what the class-action is missing and what you want the state to try to get,” he said. “There are some things we can require them to pay if we win under the law. There are a lot of other things they can agree to do in a settlement that if we go to court, we will never get, and one of those for example might be a future catastrophic health fund for what happens 20 years from now.”

Yost said there is no guarantee Norfolk Southern will agree to such a term but said it was one of things on the top of his list when it comes to settling on behalf of the state.

When given the chance to speak, residents, some overcome with emotions, overwhelmingly agreed that a health fund was a necessity as they described the health symptoms many are reportedly already experiencing. They also repeated their demands for more robust residential soil, air and water testing.

When it came to discussing the class-action settlement, residents voiced frustration and anger. The \$70,000 projected award for those living closest to the derailment, they said, will do nothing to restore their lives or remedy damages caused — especially when any derailment-related support previously received will be deducted from that amount.

Temporary-housing assistance for some relocated during the remediation efforts have already exceeded any expected award.

Residents who want to leave East Palestine said the settlement will not make that possible. Nearly all agreed, Norfolk Southern was getting off easy and said the agreement set a bad precedent that towns *“poisoned by corporate greed and negligence could be bought off”*. Residents also criticized the village government and both the state and federal EPA for *“not protecting the residents,”* a lack of transparency and a breakdown in communications with community members.

“Today, I’ve heard anger and I understand. I am deeply sorry for what you are going through,” Yost said. “I can’t make it all better but you have my commitment that we will use every tool in our toolbox to try to

hold people accountable.”

The federal settlement does address some of the concerns voiced Saturday but still falls short in the public's eye. It requires Norfolk Southern to pay a \$15 million civil penalty to resolve the alleged violations of the Clean Water Act, \$25 million for a 20-year community health program that includes medical monitoring, \$15 million to implement long-term monitoring of groundwater and surface water for a period of 10 years and an additional \$15 million to fund a drinking water monitoring fund (both municipal and private wells) for 10 years.

Complete details of the settlement as well as directions to submit a public comment are available on the Department of Justice website at justice.gov. Residents wishing to comment can also follow links available on the EPA website at epa.gov/east-palestine-oh-train-derailment.

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EXHIBIT 49



June 18, 2024

Dear Mr. Morgan,

I am Jami Wallace and my home was at 130 W. Main St., East Palestine, OH at the time of the explosion. In my household are [REDACTED] I am writing in order to have information needed to appropriately respond to the proposed settlement. As a member of the class I am entitled to the information.

I request the following complete information:

1. What is the settlement dollar figure based on? How is this figure justified?
2. Do you (my lawyer) think that I should take the settlement? Why or why not?
3. Please send me a complete set of the settlement papers submitted to the court including justification of the amount of attorney fees. (NOTE: The settlement papers are filed with the court but as class member I am entitled to a copy.)
4. If I were to opt out, are you willing to represent me in pursuing my claim?
5. Do you know anyone who is willing to represent me if I choose to opt out?
6. If I opt out, what do I have to do to pursue and preserve my claim and is there a time limit by which I have to do this?
7. What is the factual and evidentiary basis for the payments based on distance?
8. Explain how it makes sense to pay the same amount to people within 100 yards of the event from people two miles away.
9. Are the payments based on distance a representation of the amount of damage a person is likely to have suffered? i.e., when you compare the damages that a person who lives 0-2 miles from the derailment center is likely to have suffered (who is offered \$70,000) to the damages that a person who lives 2-4 miles from the derailment center (who is offered \$45,000), are the damages proportional to the ratio of 70 to 45?
10. Why is each direct payment group defined by a circumference around the derailment event? Does this approach take into account the direction in which the toxins traveled?
11. How is the distance calculated? Is it from any point on the train to the residence or property, or is it from the center of the train? Please explain.
12. Because personal injury claims have been made, and by definition, personal injuries are to individual persons, how is it conceivable that it is fair to give money by households? Households with more people necessarily have more injured people, don't they?
13. Why can't I have access to the materials lawyers received in discovery?

I request that after you respond to this letter in writing with the requested material that you meet with me personally. Please tell me when you are available.

Thank you.

Jami R. Wallace, JD, MPA, SHRM-SCP

EXHIBIT 50



2325 3rd Street, Suite 329, San Francisco, CA 94107

tel: 415.229.9720 fax: 415.789.4367

123 Justison Street
7th Floor
Wilmington, DE 19801
tel: 302.622.7000
fax: 302.622.7100

485 Lexington Avenue
29th Floor
New York, NY 10017
tel: 646.722.8500
fax: 646.722.8501

M. Elizabeth Graham
Principal
(415) 293-8210
egraham@gelaw.com

30 N. LaSalle Street
Suite 2350
Chicago, IL 60602
tel: 312.610.5350
fax: 312.214.0001

June 18, 2024

3600 Clipper Mill Road
Suite 240
Baltimore, MD 21211
tel: 410.204.1045

www.gelaw.com

VIA E-MAIL

Unity Council for the East Palestine Train Derailment
c/o Jami Wallace, President
[REDACTED]

**Re: *In re: East Palestine Train Derailment (4:23-cv-00242)*
Response to June 12, 2024 Letter**

Dear Ms. Wallace and Members of the Unity Council for the East Palestine Train Derailment,

We thank you for your June 12, 2024 letter regarding the \$600 million proposed class action settlement that was preliminarily approved by the Court on May 21, 2024 (the “Settlement”). As your letter notes, it is important for community members to receive clear and accurate information in order to properly evaluate the Settlement, assess their rights and decide whether and to what extent to participate. Unfortunately, much of the information circulating in the media and online to date has been filled with misinformation, inaccuracies and, in some cases, outright fabrications. We therefore welcome the opportunity to directly address each of your questions and concerns in writing as Co-Lead and Class Counsel for the Settlement such that you can trust the information set forth in this letter is true, correct and complete.¹

1. Why are reimbursements for lodging during relocation being deducted from settlements?

As you know, the Settlement provides for a \$600 million, non-reversionary payment by Norfolk Southern. In practical terms, this means that no money paid to the Class would revert or

¹ While we are aware of many attorneys and other parties providing information and commentary on the Settlement, only information provided by Court-appointed Co-Lead and Class Counsel, as well as the Court-appointed settlement administrator, Kroll Settlement Administration, LLC, should be considered official and binding on the Settlement. To the extent you are able to identify the attorneys referenced in your letter who are providing different or inconsistent information, we would be eager to address this with them directly.

return to Norfolk Southern, nor would Norfolk Southern receive a credit for any payments previously made to the Community. However, individual Class Members would receive offsets from their individual claims equal to monies already paid to them by Norfolk Southern. This approach is consistent with the way in which damages would be calculated in a lawsuit – that is, a Class Member would present all of their damages, including claims for reimbursement of out-of-pocket expenses, and the defendant would be entitled to a credit or reduction for any reimbursements already paid. Here, because money does not revert back to Norfolk Southern, it is being kept in the settlement fund for distribution to the classes. By employing the same approach in the claims process, the Settlement treats all Class Members fairly and equally by ensuring that Class Members who have already received some compensation from Norfolk Southern do not receive a greater share of the Settlement than Class Members who incurred the same out-of-pocket expenses but, for whatever reason, did not previously receive payment from Norfolk Southern.

2. Why are payments being made “per household” instead of per person?

With respect to the Direct Payment portion of the Settlement, claims will be paid on a “household” or family unit basis. There are many reasons for this approach.

For instance, all of the damages covered by this part of the Settlement caused by the derailment were experienced on a family, rather than individual basis. As you unfortunately know, families were forced to evacuate the area together, incurring out-of-pocket costs for temporary or extended relocation that applied equally to all members of the family. Similarly, to the extent a home was contaminated, cleaning and replacement costs applied largely to shared or communal personal property like food, appliances, HVAC units, couches, carpets, etc. Loss of use and enjoyment of the property also includes the loss of familial companionship and society within the family home as residents were forced to be away from their properties.

Further, fair and efficient administration of the Settlement claims process requires payments to be made on a “household” or family unit basis. In particular, many individual residents living within a single household do not have legally sufficient proof of their residency (e.g., bank account statements, utility bills, property records, etc.) to establish their physical presence within the Class Area at the time of the derailment. Likewise, where many of the damages suffered and compensated by the Settlement affected all members of the family unit, parsing out which portion of the award should be paid to which individual household member over another is impractical and likely to lead to unacceptable delays in delivering compensation to the Community.

At its core, the Settlement operates on the principle that Class Members know best how to implement the funds they receive to address any number of different concerns in the Community, whether they be long-term health monitoring, additional property remediation or otherwise. The same is true of the household’s ability to apportion or share in an individual Settlement award in whatever amounts or for whatever purposes they jointly decide.

a. What happens if the household does not agree on the decision to opt in or out?

The decision to participate in the Settlement implicates the release or waiver of the right to bring future claims against Norfolk Southern as a result of the derailment. To protect against the inadvertent loss of these rights, the Settlement errs on the side of caution by considering an opt-out by any one member of the household as an opt-out by the entire household. In this scenario, all members of the household have their legal rights fully protected to pursue Norfolk Southern, while also avoiding the unfair possibility that a “split” household could receive the benefits of the Settlement while still maintaining the right to bring individual claims against Norfolk Southern in the future.

b. What happens if two households reside in one home?

The Settlement uses immediate family units to define “households” for purposes of calculating Settlement awards. By doing so, multiple families living within the same residential address are able to file separate claims and receive separate awards. In other words, if two or more families share the same address, but are nevertheless distinct “households”, they may each file claims.

c. What happens if you have multiple homes?

Under the Settlement, a family unit can only have one “home” – that is, one principal residence. However, many Class Members own additional real properties that have suffered, among other things, devaluation as a result of the derailment. In the event that a household member owns additional properties, these can be identified in the Extraordinary Loss or Injury sections of the Claim Forms and may result in additional compensation (e.g., for lost rental income). Alternatively, an individual household member may file a separate claim for real property they own, but at which they do not reside by selecting *only* the “own” option on the Claim Form. Additional assistance in addressing this kind of unique scenario is available through the Court-appointed settlement administrator, Kroll Settlement Administration, LLC, via the contact information provided on the website eastpalestinetrainsettlement.com or at the Claims Center in East Palestine.

3. Are permanent relocation expenses factored into the settlement (residential and/or businesses)?

Yes, permanent relocation is a factor that is considered in connection with both residential and business claims. For residents, the Claim Form requests information that speaks directly to permanent relocation, and that information plays a critical role in the objective point-system that will be used to determine each household’s Settlement award. Additionally, residents who were permanently displaced and/or permanently relocated may explain their circumstances and provide supporting documentation in the Extraordinary Loss or Injury sections of the Claim Forms to receive additional consideration. The same is true for businesses to the extent permanent relocation is relevant to actual net business losses incurred as a result of the derailment.

4. How are residual effects on finances accounted for (residential and/or businesses)?

While the Settlement generally accounts for the residual financial effects of the derailment on individuals and businesses in the Community, it recognizes that the degree of impact may differ across otherwise similar Class Members. To that end, residents and businesses may explain any long-term or residual financial effects and provide supporting documentation in the Extraordinary Loss or Injury sections of the Claim Forms to receive additional consideration.

5. Does the Settlement count as income? Will it have an impact on public benefits and/or assistance programs?

We recognize Class Members have questions regarding the potential tax and other implications of the Settlement; however, we are not tax professionals and cannot provide individualized tax advice. *As in all settlements, Class Members should consult with their tax advisors regarding any tax obligations or impacts on public benefits.*

Still, to better assist Class Members in connection with these questions, we note that on June 5, 2024, the Internal Revenue Service issued Notice 2024-46, in which it determined that many payments to individuals affected by the East Palestine train disaster are tax-free, including payments for inconvenience, relocation, repairs, remediation, loss of value and medical payments. A copy of this Notice is available for review at <https://www.irs.gov/newsroom/irs-many-payments-to-individuals-affected-by-east-palestine-train-disaster-are-tax-free-new-guidance-could-help-those-in-ohio-pennsylvania-west-virginia>.

In terms of any impact of public assistance benefits, we have also engaged the services of Milestone (milestoneseventh.com), one of the country's leading settlement planning services that specializes in providing information and strategies to mitigate the effects of settlements on public assistance beneficiaries. Milestone is in the process of producing a webinar that will provide answers to many frequently asked questions on these subjects. Milestone will also be dedicating a representative to answer questions received at the Claims Center regarding public benefits, and it will also be scheduling "office hours" at the Claims Center to provide one-on-one information in this respect. Additional information regarding Milestone, including the webinar and the schedule to meet with a representative in-person at the Claims Center, will be posted on the settlement website shortly.

6. Does taking the settlement void minors' rights to sue on their own after 18 years of age?

If finally approved, the Settlement would release the claims of all residents, property owners, employees and businesses who lived, worked or owned property within 20 miles of the derailment site, including minors. This means that a minor would not be able to bring a claim against Norfolk Southern for the damages released by the Settlement upon reaching the age of majority. However, the Settlement does not release personal or bodily injury claims against Norfolk Southern *unless an individual Class Member affirmatively chooses to do so by participating in the Personal Injury Program and executes an individual release of liability in favor of Norfolk Southern.* Parents of minor children may choose to enroll their children in this Program by executing the release of liability on their behalf subject to Court approval as is permitted and required by law. By contrast, minors whose parents elect not to participate in this Program on their behalf would retain the right

to sue Norfolk Southern individually in the future, including in their own capacity upon turning 18 years of age. In the event a minor has already reached the age of majority, they may choose for themselves whether to participate in the Program, including signing a release of liability.

7. Will there be additional attorney fees taken after the fees allotted to attorneys?

Court-appointed Class Counsel will petition the Court for an award of fees and costs equal to a maximum of 27% and 3% of the total Settlement fund, respectively. The amount of attorneys' fees and costs awarded by the Court, if any, is subject to the Court's sound discretion and approval. The average, approximate award figures set forth in the Long Form Notice are net of these maximum attorneys' fees and costs, meaning that they are calculated after considering any reduction for fees and costs. To the extent Class Members have retained individual counsel under a valid fee contract, they should consult with those attorneys to determine whether, and to what extent, they intend to assert a claim for attorneys' fees or costs from the net amounts paid under the Settlement.

8. Why are residents being asked to give up their rights to sue government officials/agencies?

The Settlement contemplates a release of government officials and agencies only to the extent claims may arise from the incident, which is defined under the Settlement Agreement as the derailment, vent and burn operation and corresponding release of chemicals. This type of release is typical of a case like this because in exchange for payment of \$600 million, Norfolk Southern seeks assurances that it will not be sued by a government official or agency that is itself being sued by a Class Member who has already received compensation.

Importantly, however, any claims against government officials or agencies for alleged acts or omissions outside of the derailment, vent and burn and corresponding release of chemicals are not subject to the Settlement's release. While we express no opinion on whether such claims may exist or have legal merit, we do note that no such claims were asserted in this Lawsuit, nor were any government officials or agencies named as Defendants.

9. How was the 20-mile radius determined?

The 20-mile radius that defines the Class Area in the Settlement was based only on scientific data obtained independently by Class Counsel from the Community and their multi-faceted team of experts throughout the course of the litigation.² These scientific data include multiple different air models and a robust soil and water sampling plan conducted across a 30-mile radius of the derailment site³, which is the epicenter of the Class Area identified by the GPS coordinates set forth in the Settlement Agreement. All of these data indicate that the chemicals released by the derailment and vent and burn spread in varying degrees across an area equal to a 20-mile radius

² We trust this information answers the separate questions posed regarding whether we relied on EPA and/or Norfolk Southern contractor data in reaching the settlement.

³ The total area sampled under this program was roughly 2,800 square miles.

from the derailment site. Given that the primary method of release and contamination was by air, Class Members' proximity to, and direction from, the derailment site are critical factors in determining their allocation of the Settlement and are calculated on a straight-line or "as the crow flies" basis.

10. Why are current issues not addressed?

The Settlement represents the proposed resolution of private civil litigation by the Community against Norfolk Southern, and is therefore subject to the constraints of our civil justice system, including the private causes of action and remedies available under the law. Litigants in private civil litigation generally do not have the ability to obtain access to specific forms of medical care, including toxicologists,⁴ or force a Defendant like Norfolk Southern to perform specific acts like testing or cleaning of real property. Rather, civil litigation generally provides private parties with monetary compensation that then allows them to access or pay for these kinds of resources in their own right. That is precisely what the \$600 million Settlement contemplates by issuing Class Members lump sum payments, which they can then choose to use for any purpose they desire including, but not limited to, consulting with a toxicologist or further remediating/testing property.

Unlike private civil litigation such as this, claims made by government entities on behalf of citizens are separate and distinct, and may be successful in causing a Defendant like Norfolk Southern to perform specific acts in connection with the derailment. In fact, the United States Department of Justice recently announced a proposed Consent Decree with Norfolk Southern that would resolve separate litigation against it by, among other things, requiring Norfolk Southern to implement programs designed to continuously monitor the health and safety of the Community. More information about this separate lawsuit and proposed Consent Decree, including the programs it may offer to the Community, are available at <https://www.justice.gov/enrd/media/1353111/dl?inline>.

11. Why is the evidence not being released?

As is customary and typical of this type of litigation, much of the discovery and evidence, including depositions, is subject to a Court-approved Protective Order⁵ preventing the parties from publishing or otherwise sharing information obtained in the course of litigation. Additionally, information and evidence core to the litigation is subject to the jurisdiction of the National Transportation Safety Board's ongoing investigation of the derailment, including 49 C.F.R. § 831.13, which prohibits the release of information obtained during any investigation at any time prior to the NTSB's public release of the same. In this case, the NTSB has insisted that information obtained from parties like Norfolk Southern and the other Defendants must remain strictly confidential under the Protective Order until such time as it issues its final report. As such, we are legally required to keep this information, discovery and evidence confidential and cannot release it to the Community.

⁴ Indeed, in this case, the Court has already ruled that medical monitoring – a form of Court-approved medical testing – is not available to private parties under the law of the State of Ohio.

⁵ See Dkt. No. 127 (August 2, 2023 Protective Order).

With respect to the independently obtained scientific data referenced in response to Question No. 9 above, we have previously expressed our commitment to make certain data available to the Community in support of our Motion for Final Approval. Until such time that Norfolk Southern cannot back out of the Settlement and there will be need to further litigate the contested issue of environmental contamination, we cannot release these data prematurely.

12. Why is the case being settled now?

The proposed Settlement factors in a number of legal and practical realities, not the least of which is the likelihood of success on all claims, the total amount of provable damages and the certainty that Norfolk Southern would fully exercise its appellate rights on all case-critical issues. All of these factors indicate to us, in our decades of experience litigating similar cases throughout the country, that a \$600 million settlement now is far preferable to a resolution upwards of 10 years in the future, especially when that future resolution is unlikely to be materially different from the proposed Settlement based on the law, evidence and data.

In this respect, we are confident that the discovery we have conducted throughout the life of the case, including our consultants and experts' analysis of the evidence and data, gives us as much, if not more, information than has been developed by government agencies like the NTSB and EPA. In other words, we strongly believe that we know exactly what the evidence will and will not show regarding Norfolk Southern's liability, as well as the long-term nature and risks of any chemical contamination caused by the derailment and vent and burn, regardless of whether there are any ongoing investigations, outstanding reports or unaddressed pockets of contamination. Based on the work we have done, we do not envision that the NTSB report — which is inadmissible in court — makes the case any stronger; it could only make it weaker.

13. Will residents have a calculation of their final payment before they agree to opt in or out?

Individual award amounts under the Settlement are based on the information received during the claims process, as well as the total number of Class Members who submit claims. Specifically, the information obtained during the claims process is then translated into objective points across more than a dozen factors including: (1) direction from the derailment site; (2) proximity to the derailment site; (3) household size; (4) household composition; (5) acreage; (6) time displaced; and (7) damage to the property. The same process is used for calculating payments under the Personal Injury Program and includes factors like: (1) proximity to the derailment site; (2) nature of symptoms; (3) nature of formal diagnosis; and (4) course of medical treatment, if any. The average, approximate awards set forth in the Long Form Notice are based upon all available data and represent the best estimate of Class Members' expected allotment of the Settlement depending on proximity to the derailment site. More precise estimates of Class Member awards can only be determined once the claims process has been completed, all claims have been reviewed and points have been allocated to all submissions.

14. Why only \$10,000 for health monitoring?

It is incorrect and inaccurate to describe the Settlement as only providing \$10,000 for health monitoring. The Direct Payment portion of the Settlement factors into the final award funds for future health monitoring based on location and proximity to the derailment site. As discussed above, because the Settlement provides Class Members with the flexibility to use their award however they see fit, the entire amount – which may significantly exceed \$10,000 – may be used for health monitoring if Class Members and their medical providers feel that is appropriate. Additionally, those eligible Class Members who choose to participate in the voluntary Personal Injury Program may receive a further minimum payment of \$10,000 depending on their location, which can be used for any purpose, including investing it to grow to be able to pay for future medical treatment should that be necessary. Eligibility for this voluntary Personal Injury Program is based on physical location at the time of the derailment and vent and burn rather than location at the time the Settlement was announced thus allowing for participation even if a Class Member has since moved away.

15. Why are renters⁶ being forced to give 10% to their landlords?

The Settlement does not provide any right for landlords to receive 10% of a Settlement award, nor are we aware of any such legal requirement outside the Settlement. In fact, the opposite is true under the Settlement because landlords are permitted to make their own, separate claims solely for the loss of value in properties they own. We would be happy to discuss this in greater detail, but it would be helpful to understand from where this information is originating because it is not the Settlement.

16. Why are there no punitive damages?

While there is not a specific provision in the Settlement for punitive damages, the litigation risk, which risk included a potential award of punitive damages, overall led to the total \$600 million figure. Settlements, by definition, are compromises among the parties, negotiated between them. Thus, punitive damages are generally never components of any settlement. It is also worth noting that a specific award for punitive damages is generally considered taxable income by the IRS.⁷

17. Who qualifies for personal injury?

Any person who was physically present within 10 miles of the derailment site during the derailment and vent and burn is eligible to participate in the voluntary Personal Injury Program. Based on the scientific data generated and analyzed during the litigation, the Program assumes that individuals physically located within 10 miles were exposed to the chemicals released by the

⁶ We also note the question regarding Class Members who received Settlement documents under the name of a former owner or tenant. The discrepancy is explained by limitations in the publicly-available address data for the Class Area, which often times is not current or accurate. This does not impact a Class Member's ability to make a claim, and they can access copies of the Claim Forms at the settlement website eastpalestinctrainsettlement.com.

⁷ See <https://www.irs.gov/government-entities/tax-implications-of-settlements-and-judgments>

derailment and therefore eligible for Personal Injury payments.⁸ While physical symptoms, medical diagnoses and medical treatment are factors that may increase an eligible Class Members' Personal Injury payment if they choose to participate, they are not required nor is medical documentation. Instead, anyone who was physically present within 10 miles of the derailment site during this period may receive a payment if they so affirm under penalty of perjury in the Claim Form and execute the release of liability in favor of Norfolk Southern.

18. If you opt out, can you file an individual lawsuit?

Yes, opting out preserves a Class Member's right to bring an individual lawsuit against Norfolk Southern for the claims that are otherwise released under the Settlement. Class Members who choose to opt out and file their own lawsuits will not receive any benefits under the Settlement and they will be subject to all of the procedural and evidentiary requirements imposed under the law. These include the development and production of sufficiently reliable scientific and expert evidence to prove Norfolk Southern's liability and legal causation of any claimed damages. Class Members who opt out and file individual lawsuits through their own counsel may also be individually responsible for any attorneys' fees and costs incurred by those cases.

19. How many plaintiffs are included in the Settlement (households, residents and businesses)?

We understand this question to ask how many Class Members there are across each of these categories in the Class Area. The following is the available data *subject to the express caveats that: (1) the Settlement fund is not going to be evenly divided by the total number of Class Members in any category; (2) Settlement awards will vary wildly between the extremes of the Class Area, with the highest amounts generally being awarded to those closest to the derailment site; and (3) it is incredibly unlikely that all eligible Class Members will actually participate in the claims process:*

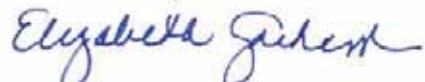
| | 0-10 Miles | 10-20 Miles | Total |
|-------------------|------------|-------------|---------|
| Households | 21,160 | 169,727 | 190,887 |
| Residents | 51,740 | 399,932 | 451,672 |
| Businesses | 1,478 | 14,218 | 15,696 |

Once again, we welcome the opportunity to have responded to these very important questions, and we expect that this information, in addition to the information already made available in the Settlement filings and through the claims process, will allow you to make informed decisions about whether and to what extent you may wish to participate in the Settlement. We understand just how difficult this entire ordeal has been for the Community, and we respect the magnitude of the uncertainties you all are confronting as you continue to deal with the aftermath of the derailment. To that point, we therefore reiterate our belief that the proposed \$600 million Settlement is the best possible outcome when considering all of the evidence, science and risks of extended litigation because it provides substantial relief directly to the Community now as opposed to a decade or more in the future. For that reason, and to ensure those who are desperately

⁸ The scientific data and evidence does not, in our opinion, support sufficient physical exposure to these chemicals beyond 10-miles from the derailment site.

depending the Settlement receive it as quickly as possible, we cannot agree to extend the Court-approved deadline of July 1, 2024, for any requests for exclusion or objections.

Very truly yours,



M. Elizabeth Graham
Co-Lead and Class Counsel

cc:

Hon. Benita Y. Pearson
Seth Katz (Co-Lead and Class Counsel)
Jayne Conroy (Co-Lead and Class Counsel)
T. Michael Morgan (Co-Lead Counsel)

EXHIBIT 51

June 19, 2024 Status Coup News, "Expert chemist calls out EPA chemical cover up: 'What are they afraid of?" Available here: <https://www.youtube.com/watch?v=jYloHQbglqo>.

EXHIBIT 52

ENVIRONMENTAL RESEARCH LETTERS

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Widespread impacts to precipitation of the East Palestine Ohio train accident

To cite this article: David A Gay *et al* 2024 *Environ. Res. Lett.* 19 074022

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Widespread impacts to precipitation of the East Palestine Ohio train accident

RECEIVED
20 December 2023REVISED
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31 May 2024PUBLISHED
19 June 2024Original content from
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National Atmospheric Deposition Program, Wisconsin State Laboratory of Hygiene, University of Wisconsin Madison, 465 Henry Mall, Madison, WI 53706, United States of America

¹ Author to whom any correspondence should be addressed.E-mail: dgay2@wisc.edu**Keywords:** atmospheric wet deposition, high pH, fire impact, precipitation chemistry, back-trajectory (HYSPLIT) modeling, NADP, chlorideSupplementary material for this article is available [online](#)**Abstract**

On 3 February 2023, a Norfolk Southern train derailment occurred in East Palestine, Ohio. The accident and subsequent fire resulted in the emissions of large amounts of hazardous compounds to the ambient atmosphere over many days. We used precipitation chemistry measurements routinely collected by the National Atmospheric Deposition Program (NADP) to estimate the spatial extent and chemical compounds deposited as a result of the accident. Our measurements revealed a large areal impact from the Midwest through the Northeast and likely Canada, and perhaps as far south as North Carolina (portions of 16 states, 1.4 million km²). Observations showed the expected high chloride concentrations, but also unexpectedly high pH (basic) and exceptionally elevated levels of base cations exceeding 99th percentiles versus the historic record. These results were consistent with the meteorological conditions and atmospheric trajectories, and were not due to highly-concentrated low volume precipitation samples or wildfires. The robust measurements of the NADP network clearly show that the impacts of the fire were larger in scale and scope than the initial predictions, and likely due to the uplift from the fire itself entraining pollutants into the atmosphere. A more detailed evaluation of the accident and resulting fire could further refine the full impact of the atmospheric concentrations, dry and wet deposition, and the more specific extent of the spatial impact.

1. Introduction

At approximately 9 p.m. on the evening of 3 February 2023, a Norfolk Southern freight train accident occurred in East Palestine Ohio, less than one mile from the Pennsylvania border. About 50 train cars were involved in the accident, of which 38 derailed and at least 11 cars were carrying a variety of hazardous materials. Some of these materials were spilled, and a fire ensued. The subsequent fire burned for a number of days and damaged other cars [1, 2].

The cargo carried by the involved railroad cars included several volatile organic compounds (VOCs), including vinyl chloride, 2-butoxyethanol, 2-ethylhexyl acrylate, etc. As the fire continued, authorities attempted to control the fire and the flow of contaminated water, and, as reported, used a small

amount of firefighting foams at the scene to control the fire. On 6 February, fire officials conducted what was described as a 'controlled release and burn' of five cars containing vinyl chloride (specifically vinyl chloride monomer, VCM), due to fear of an explosion of one or all of these cars. These cars were breached, the liquid was drained into a trench dug at the scene, and the VCM were set afire and burned. The evacuation order for the surrounding communities was lifted on 8 February, bringing an end to the active fire incident [1].

There were many reports of contaminated water and strong odors during and after the fire. The US Environmental Protection Agency (EPA) began atmospheric monitoring for a number VOCs in and around East Palestine soon after the accident. Significant atmospheric concentrations of many

Table 1. Summary of train cars involved in the accident, their cargo/content, and likely extent of combustion. Information summarized from currently available EPA tables and news reports [1, 2]. Cars with no known emissions are omitted.

| No. of cars | Car type | Reported commodity | Extent of Comb. | Estimated Car volume | Notes |
|-------------|----------|--|---------------------|------------------------------------|---|
| 5 | TANK | Vinyl Chloride (stabilized) | Complete | Combined to 422,380 l or so. | UN1086, cars subject to controlled explosion |
| 4 | TANK | Petroleum Lube Oil | Partial to complete | Entire load; 130,600 l max. | Assumed to be 80%–90% petroleum hydrocarbon distillates and 10%–20% additives |
| 2 | HOPPER | Polyethylene | Complete | 76.6–151 m ³ | Assumed to be solid beads |
| 2 | HOPPER | Polyvinyl | Complete | 76.6–151 m ³ | Assumed to be Polyvinyl Chloride (PVC) powder |
| 3 | TANK | Polypropyl, and Propylene Glycol | Near complete | Most of 130,600 l max. | |
| 2 | TANK | Diethylene Glycol | Complete | Entire load; 130,600 l max. | |
| 2 | HOPPER | Powder Flakes | Complete | 76.6–151 m ³ | Unclear what was in this car |
| 1 each | TANK | EthylHexyl Acrylate, Butyl Acrylates (stabilized), and Isobutylene | Near complete | 130,600 l max. | |
| 1 | TANK | Fuel Additives | Partial | 130,600 l max. | Unclear what was in this car |
| 1 | TANK | Paraffin Wax | Partial | Unclear; 130,600 l max. | |
| 1 | HOPPER | Semolina | Complete | 76.6–151 m ³ | Generally coarsely milled durum wheat, but also other varieties or grains (rice, corn). |
| 1 each | BOX | Medical Cotton Balls, Sheet Steel, frozen Vegetables | Complete | Total loss; 140–215 m ³ | |

chemicals were measured [3], including relatively high concentrations ($>1 \mu\text{g m}^{-3}$) of acetone (consistently high), benzene, and other VOCs, and somewhat lower concentrations ($>0.1 \mu\text{g m}^{-3}$) of ethylbenzene, naphthalene, tetrachloroethene, toluene, and xylenes. Table 1 contains a summary of the train's derailed cargo [2].

Clearly, for multiple-days, hazardous-classified chemicals were released into the atmosphere, both from spilled cargo and from the ensuing fire. However, much of the accident's impact upon the surrounding population and environment requires further study, including a complete accounting of the emissions and areal impact. Initial reports predicted the combustion products of VCM [hydrochloric acid,

carbon monoxide and phosgene gas (COCl_2)], along with a number of other VOC emissions. Several recent articles in the published and grey literature describe aspects of the emissions [4, 5].

The US federal government, states, tribal organizations, and other researchers and collaborators operate the National Atmospheric Deposition Program (NADP) [6], a suite of integrated networks designed specifically to measure the wet deposition of atmospheric pollutants in precipitation into the North American biosphere. The NADP-NTN (National Trends Network) collects weekly precipitation samples at approximately 260 sites across North America, and quantifies levels and deposition of acid anions, base cations and several other analytes. Using

these measurements, we examined the precipitation chemistry and wet deposition of precipitation acidity and selected inorganic constituents for indication of the accident's areal impact on atmospheric chemistry (figure S1). The NADP networks were successfully used previously for this type of investigation [7].

2. Brief methods and materials

The NADP-NTN provides a long-term record (since 1978) of precipitation chemistry at generally rural sites in North America. Each site makes a weekly collection of precipitation (Tuesday to Tuesday) with a wet-only precipitation collector and precipitation gage. The automated collector opens during precipitation events (rain and snow), and closes when no precipitation is occurring. Site operators follow standard operating procedures and collection times, and the laboratory has strict quality assurance for accurate and representative measurements. A multi-step validation for every sample occurs following the documented NTN protocols (see [6] for additional information).

All samples are analyzed for free acidity (H^+ as pH), specific conductance, calcium (Ca^{2+}), magnesium (Mg^{2+}), sodium (Na^+), potassium (K^+), sulfate (SO_4^{2-}), nitrate (NO_3^-), chloride (Cl^-), and ammonium (NH_4^+) ions. NADP standard instrumentation was used for the analysis, and annual detection limits, blank and calibration results are all noted for each analyte in our annual quality assurance reports [6]. Detection limits for each analyte were below 0.01 mg l^{-1} ($<0.01 \text{ pH units}$). For each analyte the concentration was measured (mg l^{-1} in precipitation), and the wet deposition (or flux, $\text{mg ha}^{-1} \text{ week}^{-1}$) determined using the rate of precipitation (mm week^{-1}) [6].

Data were used from all NTN sites in the Northeast, Midwest and Mid-Atlantic regions that had measurable precipitation and samples during the accident period (approximately 65 sites, figure S1).

We compared the NTN wet deposition measurements from the week of the train accident (31 January–7 February), and the NTN collection week immediately after the accident (7 February–14 February) to the previous 11 years of wintertime observations for the same sites and compounds. For this analysis, data from 9,800 samples were used, with 9,049 being valid samples for pH and other analytes. Of these, 8,720 samples were from the historic period prior to the accident, 56 samples were from the accident week, and 51 samples were available for the week after the accident. Many of these accident week samples were flagged for contamination (a total of 30 samples in Pennsylvania, Michigan, Massachusetts, Wisconsin, and almost every site in New York), with many flagged by the operator as having 'soot/ash/dirt' in the samples. This contamination designation is not

uncommon for rural NTN sites, but in this situation is indicative of impact directly from the accident. During the accident week, much of Pennsylvania was dry and therefore did not have a wet sample.

Basic statistics and graphical results were generated using SAS software [8]. Estimates of atmospheric transport were made using the Hybrid Single-Particle Lagrangian Integrated Trajectory (HYSPLIT) model with its forward and backward trajectory functions and Global Data Assimilation System meteorological data [9].

3. Observations and discussion

3.1. Atmospheric conditions

During the two-week period from just before to after the accident, widespread precipitation, most in the form of snow, occurred in the upper Midwest and Northeast (figures 1 and S2) [10]. However, much of the region from Illinois to Maryland was dry, including many areas in Pennsylvania and Ohio, and therefore this area had limited wet deposition collections. Had precipitation occurred here, more observations of the wet deposition impact would have been available.

On the morning of the accident (3 February), a cold front pushed through the accident region, with surface air flowing towards the south, and upper air (500 mb level) winds to the northeast. Light precipitation was occurring along the Canadian/New York border, which continued most of the week. On 4 February, a stationary front was situated to the northeast of East Palestine, with warmer air flowing north over the area and light precipitation again occurring along the border. Upper airflow remained towards the east. On 5 February, the stationary front had cleared out of the area, surface and upper level winds were to the northeast, and precipitation was occurring in southern Ontario through western Maine. A cold front was approaching from the north. On 6 February, (the day of the VCM breach), surface high pressure was situated to the west and low pressure to the east, both of which resulted in southerly surface flow. The upper level situation caused air to move into Virginia and then back to the Northeast. Light precipitation was again occurring along the Canadian/New York border to western Maine, with little other precipitation in the Midwest and Northeast.

On the morning of 7 February, an area of low pressure was situated over Lake Michigan, with a low pressure trough aloft, and an occluding cold front at the surface. Surface air at the accident site was flowing north, with significant precipitation occurring from southwest Maine to Minnesota, and heavier precipitation in southern Canada. With cyclonic rotation around this low pressure, winds were moving from the accident region to the north and wrapping around into Michigan, Wisconsin, and Canada [11].

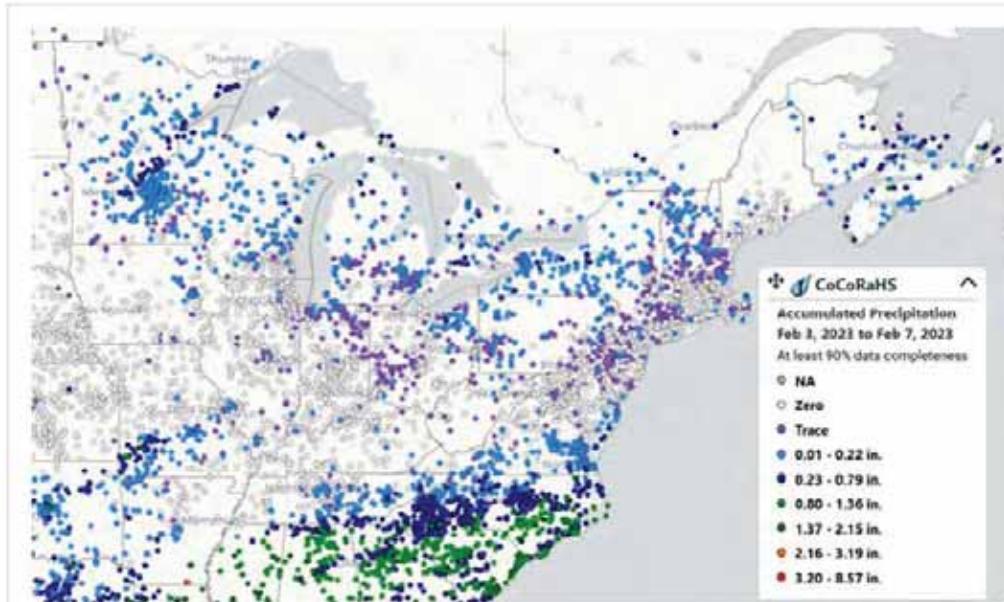


Figure 1. The location of the East Palestine train accident (star), and precipitation (inches) for 3 February (~7 a.m.) through 7 February 2023 (~7 a.m.) for the US Midwest and Northeast [10]. Reproduced from [10], CC BY 3.0.

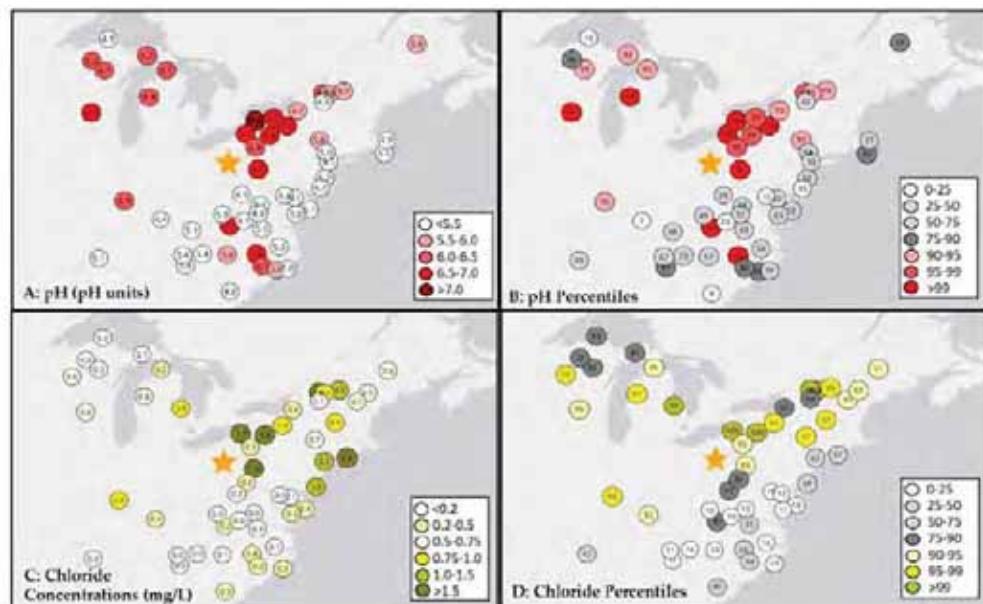


Figure 2. Wet deposition observations from 31 January through 7 February 2023 for (A) precipitation pH (pH units), (B) pH percentiles as compared to 2011 through 2021 wintertime observations, (C) chloride ion concentrations in precipitation (mg L⁻¹), and (D) chloride ion percentiles as compared to 2011 through 2021 wintertime observations. The location of the East Palestine train accident is marked with the star.

3.2. Chemical observations

In our review of the NADP-NTN analytical data, we expected to observe precipitation with lower pH and higher chloride values, given the likely emissions profile, and only find influences near the accident location (figure S1). We were surprised to find no unusually low (more acidic) pH values, but in fact found

exceptionally higher (more basic) pH than normal (figure 2(A)). Typical annual average pH values for precipitation in the northeastern US are between 5.2 and 5.8 pH units [12], with winter pH values characteristically lower. For example, at site PA18 near the accident location, a typical winter pH is 4.9 pH units.

These anomalously high pH values were not restricted to the proximate accident location, but were widespread over the Northeast and Midwest. Figure 2(A) shows the accident week pH values measured by NADP, ranging from 6.4 to 7.3 pH units in the north and east, and near normal to the south. Values this high are rarely seen in the NADP weekly measurements, and never observed consistently over multiple sites in any one particular week. High values likely extended into southern Canada, but there are no NADP measurements here (see [13] for observations as available). Exceptionally high pH values also extended back into Michigan and Wisconsin, and similarly into Virginia and Indiana at a few locations. The interpretation of the two higher North Carolina values is complicated by high local emissions of ammonia and normally more basic pH values.

To put these unusually high values into perspective, we compared these accident week measurements of pH and all constituents to historic NTN values, and present the values as percentiles of the historic range (figure 2(B)). Percentiles were calculated for wintertime observations only (December, January, and February) for years 2011 through 2021 on a site-by-site basis. This accounts for any seasonality and long-term trends of the observations. A 100th percentile indicates the highest observation over this 11 year period.

From this analysis, it is clear that the pH values measured during the accident week were extremely high relative to historic data, and at 6 NTN sites actually represent the highest pH values measured over the period analyzed (figure 2(B)). Many more observations from the 14–16 state area were above the 90th percentile. This scale of observation alone at one or two sites may not be particularly compelling, but the sheer number of extreme percentages during this one-week period suggest a large impact to the atmosphere from the train accident over the Northeast and Midwest. The impact is especially clear over western Pennsylvania (near East Palestine), along the entire New York/Canada border, with decreased impact in northern Maine, and along the Eastern Seaboard (Nantucket Island did have unusually basic precipitation). Again, these consistently high pH values likely extended into southern Canada.

The same analysis was conducted for chloride ion concentrations (figures 2(C) and (D)). A similar pattern of exceptionally high chloride values is evident in the data. Values above the 90th historic percentile are frequent, with most from sites in the Northeast, but also Indiana, Michigan, and Wisconsin being historically very high. More normal values occur along the East Coast and into the southern states. From these two maps, it is very clear that extreme concentrations of multiple pollutants were present over a widespread area during the days after the accident, and resulted in enhanced deposition of these pollutants to aquatic and terrestrial ecosystems, including the

Lakes Michigan, Erie, Ontario, and likely Huron and Superior.

This pattern of extreme concentration percentiles is also evident for the base cations, sodium, potassium, and calcium (Northeast in figure 3, and East in figures S3–S11). However, in-contrast, the percentiles for sulfate and nitrate were not as extreme as those of pH, chloride, and the base cations. The sulfate and nitrate values were high, but not as regionally consistent as the other compounds. For ammonium, very high concentrations were measured near the accident location and into New York. It is important to note that both sulfate and nitrate are secondary pollutants, or requiring atmospheric reactions from precursor gases, unlike the other pollutants.

Additionally, we observed that high percentiles for the same suite of chemicals (chloride, cations) extended into the week after the accident (7–14 February, not shown). However, the high percentiles moderated, and were generally further south into the Mid-Atlantic states. The upper Midwest concentrations return to a more normal range in the week after the accident, but many elevated pH values remained from Pennsylvania to Massachusetts, and well into Virginia. Sulfate, nitrate and ammonium levels were frequently high during the week after the accident, but not to the extreme extent as was measured with the other chemicals. See table S1 for all percentile ranks observed during the accident week.

From these observations, we can conclude that the major consequence from the accident was a widespread multi-pollutant impact over multiple states that extended beyond the accident week. We did not examine the third week after the accident in detail, but both the pH and chloride values were quite elevated at many sites, and particularly so in New York.

3.3. Meteorological observations and trajectories

Our precipitation chemistry observations are consistent with the state and flow of the atmosphere during and after the accident. First, the largest impact is seen at our NTN sites along the Canadian/New York border where precipitation (figures 1 and S2) occurred repeatedly from 3 February to 7 February. These sites were downwind of East Palestine during this period, and follow the predicted forward trajectories (figures 4 and S12(a)–(c)). Second, with the passage of the cold front on 5 February, air moved well into the southern US, to Virginia, Tennessee and Kentucky. The rain produced by the frontal passage likely then washed accident emissions out of the atmosphere at some of these sites. This flow into Virginia and North Carolina was confirmed with HYSPLIT forward trajectories (figures 4 and S12(a), (b)).

However, the impacts to precipitation chemistry in Michigan, Lake Michigan, and Wisconsin was

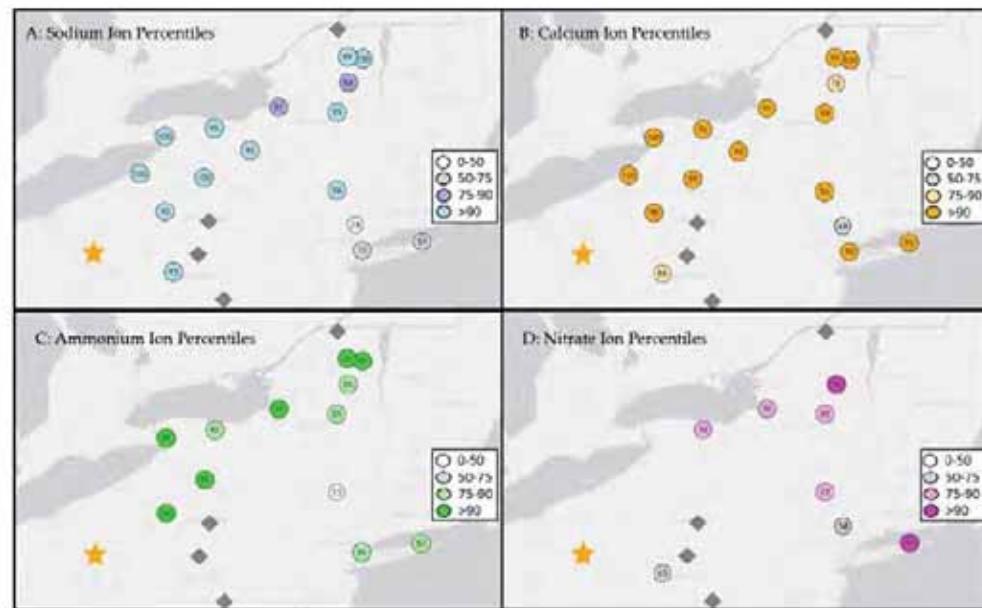


Figure 3. Wet deposition observations for New York and Pennsylvania from 31 January through 7 February 2023 for (A) sodium ion percentiles, (B) calcium ion percentiles, (C) ammonium ion percentiles, and (D) nitrate ion percentiles. Gray diamonds are NADP sites with no precipitation, and therefore no observations. The location of the East Palestine train accident is marked with the star.

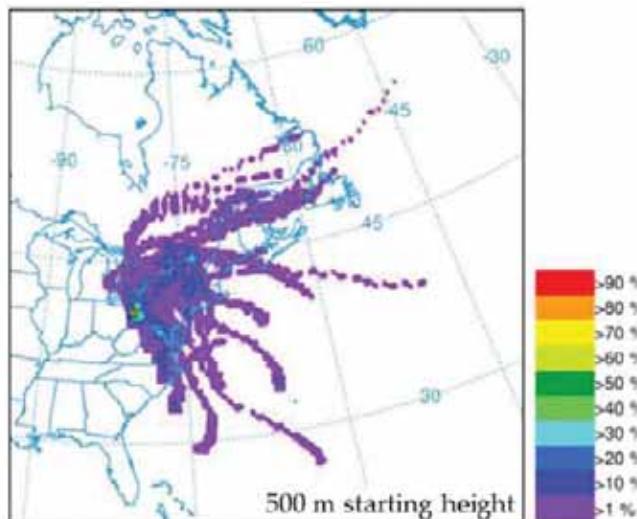


Figure 4. HYSPLIT (Hybrid Single-Particle Lagrangian Integrated Trajectory) model forward trajectories for the accident week full fire period (1800 UTC 3 February 2024 through 1500 UTC 8 February 2024) for a 500 meter starting height and 48 h trajectory time. Color codes are the frequency of endpoints grid square/total number of trajectories (HYSPLIT output 'freq'), in %.

something of a surprise. Further detailed investigation of the meteorology showed air just above the surface moving towards the north-northwest at 6 p.m. on 6 February, as the controlled burn was concluding. A quickly moving low-pressure system was centered over Lake Michigan, associated with an occluding frontal system on that morning. Flow

to the north/northwest and cyclonic flow (counter clockwise) at 925 millibars continued through to 6 a.m. on 7 February (figure S13), and likely moved pollutants into the upper Midwest region.

HYSPLIT forward trajectories showed air from the accident site clearly flowing north into Canada, and regional movement from central Ohio into

southeastern Michigan, but not into western Michigan and Wisconsin. It is possible that the HYSPLIT meteorological information did not capture the westward motion driven by the cyclonic flow present over Lake Michigan. Back trajectories from several points in western Michigan and southern Wisconsin during this late week precipitation event do show air originating in eastern Ohio, particularly at low levels (300 and 500 m, S12(c)), which does support that these extreme concentrations likely resulted from the accident. Further evaluation of surface observations for several locations in Michigan and Wisconsin on 6/7 February (Detroit, Saginaw, Grand Rapids, Milwaukee, Oshkosh) all show distinct surface flow to the west for consecutive hours between 6 February 10 a.m. through the morning of 7 February with high wind speeds (>15 miles per hour), followed by a distinct wind shift to eastward flow. All of this is quite consistent with a frontal passage, cyclonic flow, and widespread precipitation as the front passed (figures 1 and S13) [11, 14]. These observations argue that the conditions were in-place for accident pollution to move across Michigan and Wisconsin, and that precipitation removed the pollution as wet deposition as measured. Additionally, the Wisconsin and southern Michigan sites *only* experienced precipitation during the afternoon of 6 February, when cyclonic flow and contaminated air should have been present.

3.4. Likely sources of high cation concentrations and pH

High atmospheric chloride concentrations near the accident were expected, but the extremely elevated concentrations/percentiles of the base cations and high pH measured were surprising. Several studies have examined direct combustion of VCM under controlled conditions, and show overwhelming direct emission of HCl (ratio: 675 HCl:1 Phosgene at 950 °C) [15] and over 99% emission of Cl directly as HCl, but noted that more organic Cl forms could be emitted at lower temperatures (330 °C) [16]. It is important to note that anything but controlled conditions were prevalent during this accident, along with other non-VCM fuels simultaneously combusting. Therefore, oxidation of VCM after emission and emission of other organic chloride compounds (with subsequent atmospheric transformation) cannot be ruled out. Details about the accident relevant to chemical sources is only slowly becoming available, but we can make some initial interpretations of our observations from available information on fire response activities and the combusted cargo.

First, the train cargo burned during the accident included one single carload each of seminola (hard, Durham wheat), medical cotton balls, and frozen

vegetables, among other products (table 1). As reported, these cars were full and completely combusted and we estimate total emissions of between 600 and 1100 kg of calcium, potassium, magnesium and sodium, using estimated cargo volumes, densities, and average cation concentrations [17–20]. Although these are rough estimates, it does show an important large and concentrated cation source (figure 3).

Second, between 22 and 26 February, news reports noted that PFAS-containing aqueous film-forming foams (AFFFs) were applied in the accident response, and that very large quantities of water used or impacted in the fire response is currently being disposed of through deep well injection due to elevated PFAS concentrations [21–24]. The National Transportation Safety Board hearings in June 2023 and related documents confirmed AFFF application in at least low amounts [25]. According to product specifications, this AFFF includes both PFAS and sodium sulfate compounds. Current AFFF formulations are also based in part on the addition of diutan gum/base cation mixtures [26]. If responding fire fighters used some type of common non-PFAS suppression dry powders or foams (Class A or B), which are usually based on sodium and potassium bicarbonate salts, this would also partially explain very high Na additions (observed) and high pH values (also observed), among other high cation concentrations. It is reasonable to conclude that the high cation precipitation concentrations were, in part, a result of injection into the atmosphere of fire suppressant cations applied over the multi-day accident response.

And *third*, high base-cation concentrations in precipitation are typically associated with elevated cation (calcium, sodium) carbonate (or oxides) compound emissions which result in the neutralization of acidity and thus higher than typical precipitation pH [27, 28]. Also, a very large volume of glycol compounds were completely combusted (5 train carloads or more), likely leading to substantial emissions of hydroxide ion (OH^-) in the fire plume (table 1), with further impacts on atmosphere/precipitation pH.

Clearly, the combustion of the train cargo and fire suppression employed provide many probable sources of the high cation concentrations and high pH observations seen downwind in the weeks after the accident. These explanations do not include other unknown emissions from the train cars and their contents.

3.5. Other explanations for high concentrations?

In wet deposition science, a well-known relationship is that low precipitation volume samples are associated with high ion concentrations, since the atmospheric pollutants are being removed with less precipitation. Lower concentrations are commonly

seen with high precipitation volumes, as noted by Lindberg, among others [29]. The generally low precipitation volume in the Northeast during the accident week contributed only marginally to higher chemical constituent concentrations as explained below.

First is the overwhelming presence of high pH (*lower H⁺ concentrations*). In general, as precipitation volume decreases, lower pH (*high H⁺ concentration*) would be expected. Therefore, the occurrence of so many high pH values (*lower H⁺ concentrations*) argues against lower precipitation volumes leading to these high concentrations.

Second, high analyte concentrations were present regardless of the precipitation amount. Figure S14 shows all of the compound percentiles and precipitation amounts (volumes) for all New York sites. Site NY10, one of the closest to the accident, is one of the most extreme in percentile concentrations, but has the highest precipitation volume of all sites. NY99 (southeast New York) is also instructive; this site had very high precipitation volume (roughly equivalent to NY10), but had normal concentration percentiles and is likely south of the main accident emissions plume. NY93 (northern New York) also has extreme concentrations but also experienced higher precipitation. Other good examples are VA13, where almost 2 inches of precipitation occurred and has exceptionally high concentration percentiles.

Third, it is possible that the high Cl and Na came from road salt contributions as applied during the accident week over a broadly distributed area with snow (figure S2). We reviewed the historic (both winter and warm season) and accident week observations for a 1:1 Cl:Na ratio that would suggest major road salt contributions. Over all 11 historic winters, where road salt application is frequent, widespread and quite heavy, chloride and sodium levels never approached the extreme levels observed during the accident week (figure S15). Additionally, the Cl:Na ratio is typically between 1.1 and 1.2, is unlikely to be measured at 1:1, and can also go below 1. This suggests a much more complicated relation between Na and Cl. Some accident week ratios did move closer to a 1:1 ratio, but some ratios were higher and some ratios were less than 1:1. There was no consistent 1:1 ratio as would be expected if there was a large road salt contribution. Even sites with no/little snow and no salt addition in the area moved lower than normal conditions. Additionally, the accident week was generally a lower snow week over the multi-state area which argues that lower salting activities occurred. But, all accident week observations did show extremely large additions of both Cl and Na; this was consistent. Therefore, we must conclude that it is unlikely that these observations are caused by deicing salt, and that a high source emission of both Cl (from

the VCM combustion) and Na ion occurred during the accident week.

A fourth possible explanation for these high concentrations would be that of widespread injection of aerosols from wildfire or forest fires. However, these types of fires are not common during the wintertime. A check for these conditions during early February showed that there were no major forest fires burning in the US, and that February 2023 was in fact lower than normal in the total number of fires and acres burned (50 000 acres) [30, 31]. This was also the case in Canada, where there were no major fires during February [32].

It is also conceivable that during the accident week, the 'normal' suite of sources over this area could have caused these observations: i.e. industrial activities and combustion, agricultural area sources, vehicles, etc. Undoubtedly, these sources contributed a fraction of the pollution burden for these normally observed chemical constituents. However, the extreme nature of these concentrations, seen at so many sites during this one week, argues that something besides the normal sources caused these historic winter concentrations, and that there must have been a separate multi-compound addition to the historic measurements. This extreme nature is clearly shown in figure S15, where this week stands above all other weeks in the 11 year historic period.

3.6. Overall summary observations

Integrating the observations of all compound concentrations and percentiles during the accident week, we sum the number of compound percentiles that were equal to or exceeded the 99th percentile to provide an overall estimate of the impact area. Figure 5 shows the sum of compounds at each site at or above the 99th percentile, and therefore the estimated areal extent of the accident (see figures S16, S17 for 90% and 95%, table S1 for all percentile ranks). From this, we estimate that the accident influenced a substantial portion of the US Midwest and Northeast, and extending into several southern states. In total, the impacted region encompassed parts of 1.4 million square kilometers or 14% of the US land area. At this level of certainty, 19 sites had at least one chemical compound in the 99th percentile, while 8 sites had 4 or more compounds in the 99th percentile.

In total, we estimate at least some impact on portions of 16 states and one third of the population of the US (110 million), and likely impacts to southern Ontario, and many of the Laurentian Great Lakes.

As a final check of reasonableness, we made a fairly simple estimate of the total excess Cl deposition to our study area resulting from the train accident. For this, we took all 20 sites with Cl concentrations above the 90th percentile during the accident week, and

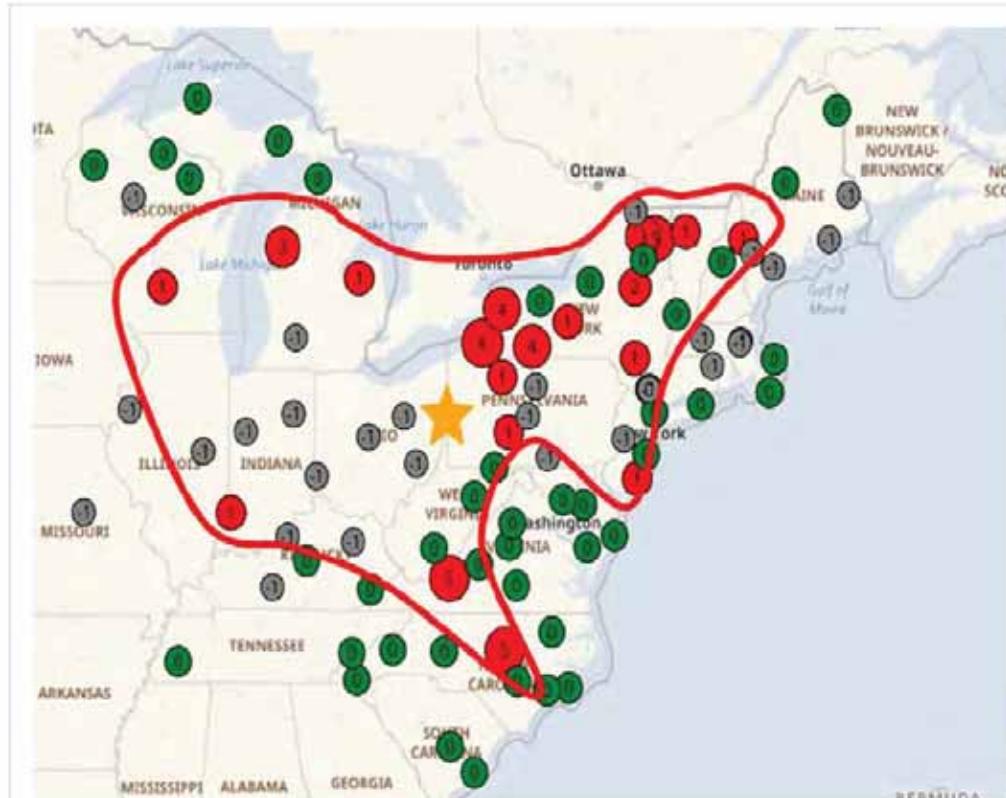


Figure 5. Summary area of impact, for the first week of the accident, based upon the sum of chemical analytes above the 99th percentile of historic measurement. Red indicators show the number of precipitation analyte concentrations above the 99th percentile. Sites with samples (green, '0') and without samples (grey, dry samples or '1') are included.

subtracted away the 2021/2022 winter precipitation-weighted average site concentration. We then multiplied this value by the accident week site-specific precipitation amount to estimate excess chloride deposition at each site ($\text{mg m}^{-2} \text{ week}^{-1}$). We then assumed a 10 000 sq. mile impact area to each site—which gave a reasonable approximation of total area, by state that had precipitation during the accident week. With this large number of simplifying assumptions, we estimated excess Cl deposition over the area equivalent to about 140% of the estimated mass of VCM combusted (see table S2 for specifics). Although marginally higher than the reported VCM mass in the tank cars, it is certainly within an order of magnitude of what was measured across the NADP network. It is certainly possible that there were other, non-VCM related Cl emissions from the fires. However, we do believe that this simplified mass-balance estimate bolsters our contention that the train accident fires contributed this chemical signal to a large surrounding area.

This is only an initial assessment of the impacts of the train derailment on atmospheric and precipitation chemistry, using publicly available NADP-NTN data; much more can be added to this

understanding of the accident's impact. Additional study should focus on (1) a comprehensive modeling of the atmospheric dynamics and chemistry to more specifically show what pollutants were transported away from the accident location, where these concentrations were found, and how long these concentrations were present over a significant section of the US and Canada; (2) determine emission rates of the expected pollutants over time during the 5 accident days for further modeling; (3) examination of the atmospheric concentration measurements made by the Clean Air Status and Trends Network which measures rural concentrations of many of the same compounds in atmospheric aerosols; (4) a week-by-week investigation of the depositional differences of the pollutants to show overall flux increases; and (5) a full factor analysis to determine how uniform the high concentrations were over the affected area to provide additional support for the train accidents impact.

This paper does show the great value of a nationwide network for routine precipitation monitoring. Our observations allowed us to determine, initially, the regional atmospheric impact from the accident and subsequent response activities.

The NADP networks do not currently quantify specific organic compounds that might be more specific tracers of the train cargo, but given the widespread impacts to precipitation documented with currently measured NADP analytes, it is possible that there was a significant toxic organic flux to the earth's surface.

Data and materials availability

All measured data will be made available at the NADP website (<https://nadp.slh.wisc.edu/networks/national-trends-network/>) upon completion of the annual quality assurance and quality control of the network, following our normal operational procedures.

Acknowledgments

The NADP is the National Research Support Project-3: A Long-Term Monitoring Program in Support of Research on the Effects of Atmospheric Chemical Deposition. More than 250 sponsors support the NADP, including private companies and other non-governmental organizations, universities, local and state government agencies, State Agricultural Experiment Stations, national laboratories, Native American organizations, Canadian government agencies, the US Geological Survey, the US Environmental Protection Agency, the National Park Service, the National Oceanic and Atmospheric Administration, the US Fish & Wildlife Service, the Bureau of Land Management, the US Department of Agriculture—Forest Service, and the US Department of Agriculture—National Institute of Food and Agriculture under Agreement No. 2022-39133-38451. Any opinions, findings, and conclusions or recommendations expressed in this publication are those of the authors and do not necessarily reflect the views of the program sponsors or the University of Wisconsin-Madison.

Conflict of interest

The authors declare that they have no conflict of interests. *This work was partially funded by the US Department of Agriculture—National Institute of Food and Agriculture under Agreement No. 2022-39133-38451, and the Wisconsin State Laboratory of Hygiene, General State Revenues.*

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EXHIBIT 53

The Washington Post
Democracy Dies in Darkness

Pollution from East Palestine train derailment rained down in 16 states, study says

People closer to the accident reported rashes, nausea and headaches — but the study author said the low concentrations farther away from the accident weren't "toxic, but are pretty unusual at a lot of places."



By Kasha Patel

June 19, 2024 at 4:00 a.m. EDT



A large plume of smoke rises over East Palestine, Ohio, after a controlled detonation of a portion of the derailed Norfolk Southern trains in February 2023. (Gene J. Puskar/AP)

On Feb. 3, 2023, a [train carrying toxic chemicals](#) crashed in northeastern Ohio, sending up a large black cloud over Ohio and Pennsylvania after officials decided to burn off the hazardous materials. As the chemicals lofted into the air, the pollution spread as far as 16 states, according [to a new study](#).

"I didn't expect to see an impact this far out," said David Gay, lead author of the study. "There's more going on here than most people would have guessed, including me."

Toxic chemicals rained down from South Carolina to Wisconsin to New England following the accident, according to the new analysis in the *Environmental Research Letters* journal. Overall, the pollution spread over 540,000 square miles, or 14 percent of U.S. land area.

People closer to the accident reported rashes, nausea and headaches — but Gay said the low chemical concentrations farther away from the accident weren't "toxic, but are pretty unusual at a lot of places." Many of those pollutants can run off and affect marine and plant life.

"It's not death and destruction. It's fairly low concentrations, but they are very high relative to the normal that we typically see — some of the highest we've measured in the last 10 years," Gay said.

The accident occurred around 9 p.m. on Feb. 3 near East Palestine, a town of almost 5,000 residents on the Ohio-Pennsylvania border. The train, operated by Norfolk Southern, experienced a mechanical issue that caused more than 50 cars to derail. Some of the trains were carrying hazardous materials, including a known human carcinogen called vinyl chloride.

In an emergency decision, officials authorized a controlled burn of the hazardous chemicals to prevent a catastrophic explosion. But as the vinyl chloride burned, it broke into separate chloride and hydrogen ions in the atmosphere that got carried by the wind to other locations.

When it began to rain in various places, the pollutants were pushed from the air and deposited on the ground. The National Atmospheric Deposition Program, at the University of Wisconsin at Madison, collects these ground depositions weekly across 260 sites across North America. Gay, who serves as coordinator of the program, routinely analyzes the data to monitor air pollutants.



Areas with abnormally high chloride ion concentrations the week of and week after the East Palestine train derailment are shown. Yellow circles show measurements in the 90th percentile or above, compared to the last decade. East Palestine is marked with a star. (Gay, et al. (2024)/Gay, et al. (2024) via CC BY 4.0)

“If you have a lot of pollution in the atmosphere, you get a lot of wet deposition pollution at the ground,” Gay said.

He and his team analyzed ground depositions from the week of and following the train accident (Jan. 31 to Feb. 14), and then compared them to the previous decade or so. Many samples taken during the week of the accident in Pennsylvania, Michigan, Massachusetts, Wisconsin and New York were flagged for contamination, showing soot, ash and dirt.

Initially, Gay expected to see only a few abnormally high chloride signals nearby in Pennsylvania, but the impact was much higher than he anticipated. High chloride concentrations spanned as far as Virginia, South Carolina and Wisconsin. The highest concentrations were located near the Canada-New York border, which was downwind of East Palestine.

The pollutants disappeared within two to three weeks after the accident.

The data also showed another unusual trend for the researchers. Gay explained that typically rain without pollutants is a bit acidic, meaning it has a good amount of hydrogen ions. However, the collected samples showed less hydrogen ions than usual, making the rain more basic than expected. Gay suggests that metals emitted from the fire, like calcium, sodium, potassium and magnesium, helped to suck up a bunch of those hydrogen ions that are normally present in our atmosphere.

“This study is unique and elegant as it clearly documents the impact that these kinds of accidents can have,” said Juliane Beier, a leading expert on the effects of vinyl chloride at the University of Pittsburgh who was not involved in the study.

But she said this is not the first time researchers have seen distal effects of local environment events, and it’s unclear what long-term impact such environmental exposures could have on communities.

“I think we should be concerned,” said Beier.

EXHIBIT 54



Ohio

Chemicals from East Palestine derailment spread to 16 US states, data shows

Rain and snow samples from Wisconsin to Maine and North Carolina after crash show highest pH levels over last decade

Tom Perkins

Wed 19 Jun 2024 08.00 EDT

Chemicals released during the East Palestine train wreck fires in February 2023 in Ohio were carried across 16 US states, **new research** of federal precipitation and pollution data shows.

Analysis of rain and snow samples collected from northern Wisconsin to Maine and North Carolina in the weeks following the crash found the highest levels of pH and some compounds recorded over the last 10 years. That includes chloride, which researchers say was largely released during a controversial controlled burn of highly toxic vinyl chloride carried by the train.

Researchers expected to find some evidence of the burn 50 miles from the site, and the high levels of contamination in the samples across the vast range that it was spread was “very surprising”, said David Gay, a University of Wisconsin researcher and lead author.

“We saw the chemical signal from this fire at a lot of sites and far away,” he added. “There was more than we ever would have guessed.”

Dozens of cars on the Norfolk Southern train derailed and burned in the town of 4,700 at the edge of the Appalachian hills. The fire burned near tankers carrying vinyl chloride, and, two days later, fearing a “major explosion”, officials conducted a controlled burn of the chemical as a prevention measure.

In the immediate vicinity and in pockets throughout the city, a potent chemical odor hung in the air for weeks. The pollution also spread far and wide because the wreck’s fires burned for so long, and the controlled vinyl chloride burn was extremely hot and concentrated, Gay said. It sent a towering plume into the Earth’s free troposphere, where winds often blow between 50 and 100mph.

“That can distribute pollution a long way ... and it was a nasty little fire with lots of emissions,” Gay said.

Researchers looked for a range of inorganic compounds in rain and snow water samples collected at 260 sites around the nation as part of the National Atmospheric Deposition Program.

The analysis included inorganic compounds because the federal government does not check precipitation samples for organic compounds, like dioxin or **PFAS**, which were also likely emitted and spread far from the fire’s site.

Chloride, or chlorine, can be a potential health and environmental threat, Gay said, but the levels researchers found “wasn’t melting steel or eating paint off buildings”.

“But these concentrations were very extreme for what we usually see,” he added.

Researchers were surprised to find “exceptionally high” pH levels in the rain as far away as northern Maine. Rain at a high enough pH can burn human skin and harm flora and fauna, though Gay said the threat is minimal because it was a short-term spike.

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He theorized the train’s cargo, which included medical cotton balls, frozen vegetables and semolina likely contributed to the high pH because it released huge volumes of calcium, potassium and magnesium. Meanwhile, firefighting foam that may have been used at the scene also could have contributed high calcium levels that pushed up pH levels.

Chloride and pH levels were highest in northern Pennsylvania just east of the wreck, and along the US-Canada border. Though data for Canada was not available to researchers, Gay said he is certain that country’s precipitation was also contaminated.

There was no precipitation or measured rain in some regions to the south and west of the wreck in Kentucky, Indiana and West Virginia, but Gay said it is almost certain the pollution came down in those regions as well, but in the air instead of in rain or snow.

Meanwhile, a low pressure system that moved over the region during the burn pushed the pollution across Michigan and into Wisconsin. All the Great Lakes except Lake Superior were likely affected, Gay said.

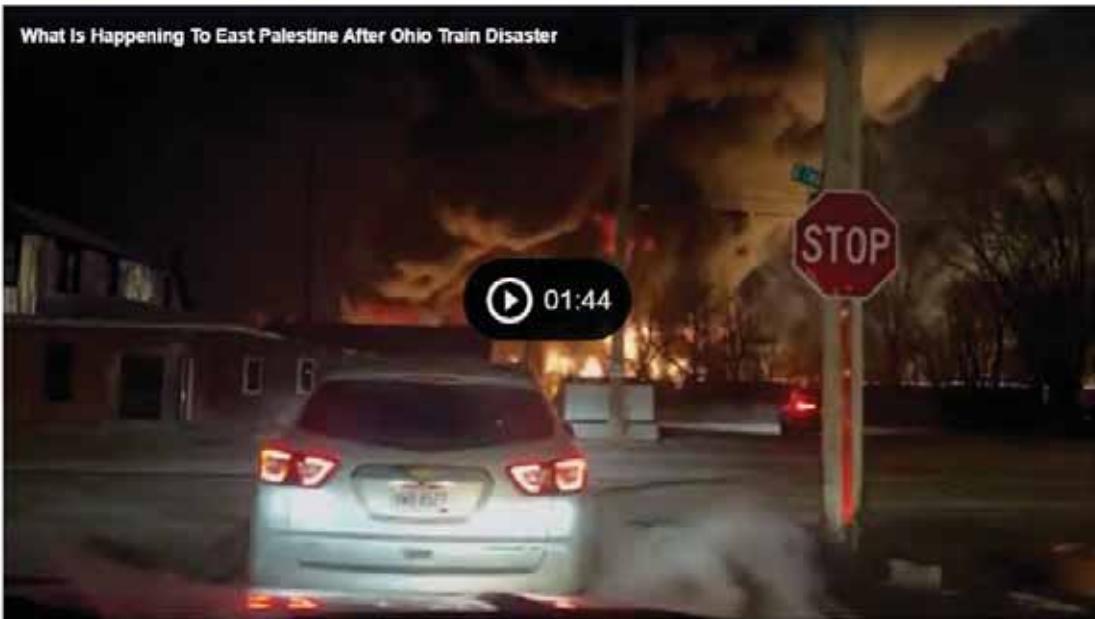
The levels remained elevated for the first two weeks following the fire before markedly dropping in the third week.

“That’s further evidence that it’s from the train wreck,” Gay said. Though the impact of organic compounds is unclear, the inorganic findings suggest “a little shock to the system, but the system should be fine”, he added.

EXHIBIT 55

Maps Reveal Pollution Fallout From Ohio Train Derailment — With 16 States Hit

Published Jun 19, 2024 at 2:06 PM EDT | Updated Jun 20, 2024 at 8:48 AM EDT



By [Jess Thomson](#)
Science Reporter

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Over a year after a train derailed in a small Ohio town, spilling a cocktail of toxic chemicals into the environment, scientists have mapped just how far these pollutants traveled.

Up to 540,000 square miles, spanning 16 U.S. states surrounding the site in East Palestine, Ohio, had some traces of the inorganic chemicals released during the disaster, according to a new paper in the [journal Environmental Research Letters](#).

"In total, we estimate at least some impact on portions of 16 states and one third of the population of the U.S. (110 million), and likely impacts to southern

Ontario, and many of the Laurentian Great Lakes," the researchers wrote in the paper.



Map showing area of impact of derailment in East Palestine, Ohio, for the first week of the accident. Red indicators show the number of precipitation analyte concentrations above the 99th percentile. **GAY ET AL. ENVIRONMENTAL RESEARCH LETTERS 2024. DOI: 10.1088/1748-9326/AD52AC.**

The East Palestine, Ohio, train derailment on February 3, 2023, involved a Norfolk Southern freight train carrying a variety of hazardous materials. At approximately 8:55 p.m., 38 of the train's cars derailed. The derailed cars included those carrying vinyl chloride, butyl acrylate, and benzene, among other hazardous substances, which were released into the environment after the incident.

A controlled burn of many of the chemicals was performed afterward to prevent an explosion, sending up a plume of black smoke. This smoke may have contained a number of other hazardous chemicals, including phosphene gas—used as a chemical weapon in World War I—which forms when vinyl chloride is burned.

The new study has found that inorganic pollutants spread far and wide after the disaster, with unusually high (alkaline) soil pHs being recorded in rainfall across a vast spread of the U.S., as well as abnormally high levels of chloride ions.

"Our measurements not only show the expected high chloride concentrations, but also the vast geographical area they covered," study co-author David Gay, a coordinator of the National Atmospheric Deposition Program (NADP), [said in a statement](#).

"However, even more surprising are the unexpectedly high pH levels (more basic) and exceptionally elevated alkali and alkaline earth metals, exceeding the 99th percentiles of the last ten years of measurements."

High levels of sodium, potassium, ammonium and calcium ions were also detected in a variety of locations following the derailment.

"From these observations, we can conclude that the major consequence from the accident was a widespread multi-pollutant impact over multiple states that extended beyond the accident week," the researchers wrote in the paper. "We estimate that the accident influenced a substantial portion of the U.S. Midwest and Northeast, and extending into several southern states. In total, the impacted region encompassed parts of 1.4 million square kilometers [540,000 square miles] or 14 percent of the U.S. land area. At this level of certainty, 19 sites had at least one chemical compound in the 99th percentile, while 8 sites had 4 or more compounds in the 99th percentile."

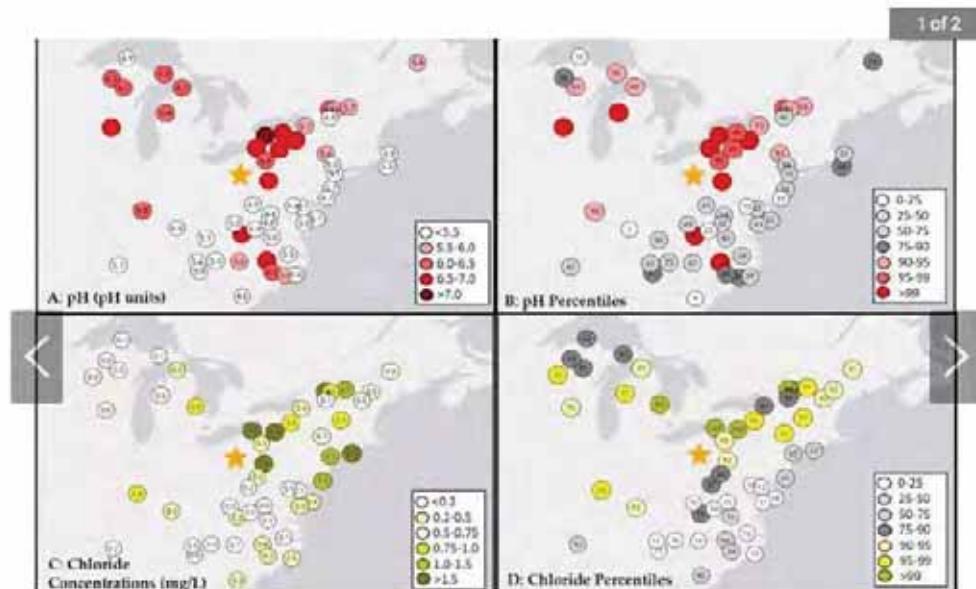


Image from the paper showing rainfall chemical observations from 31 January through 7 February 2023 for (A) precipitation pH (pH units), (B) pH percentiles as compared to 2011 through 2021 wintertime observations, (C) chloride ion concentrations in precipitation (mg L⁻¹), and (D) chloride ion percentiles as compared to 2011 through 2021 wintertime observations. The location of the East Palestine train accident is marked with the star. **GAY ET AL. ENVIRONMENTAL RESEARCH LETTERS 2024. DOI: 10.1088/1748-9326/AD52AC.**

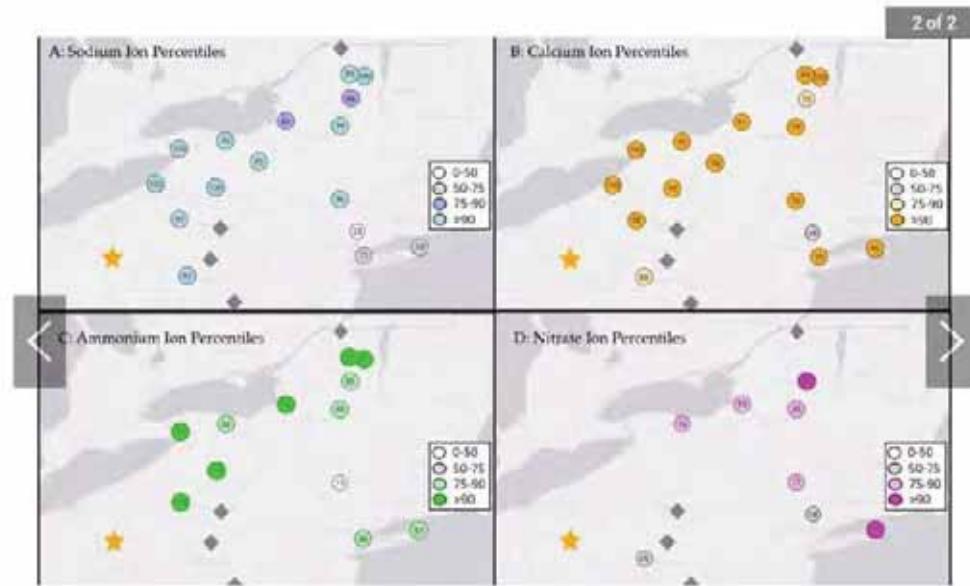


Image from the paper showing rainfall chemical observations for New York and Pennsylvania from 31 January through 7 February 2023 for (A) sodium ion percentiles, (B) calcium ion percentiles, (C) ammonium ion percentiles, and (D) nitrate ion percentiles. Gray diamonds are NADP sites with no precipitation, and therefore no observations. The location of the East Palestine train accident is marked with the star. GAY ET AL. ENVIRONMENTAL RESEARCH LETTERS 2024. DOI: 10.1088/1748-9326/AD52AC.

These chemicals being present in precipitation may have had a number of impacts on the local plants and animals in these locations, the authors suggest, and note the degree of chemical pollution that can fall to Earth in the rain after an accident such as the derailment.

"All of these pollutants are important in the environment because their accumulation has an impact on the Earth's aquatic and terrestrial environments in many ways," Gay said.

"This study demonstrates the important role of a nationwide network for routine precipitation monitoring. Our observations allowed us to determine the regional atmospheric impact from the accident and subsequent response activities."

EXHIBIT 56

June 20, 2024 Scripps News segment, "Toxic chemicals discovered in the ground near Ohio derailment site concern residents 6-19-24." Available here:
<https://www.youtube.com/watch?v=Kaw9ibLlcVo>.

EXHIBIT 57

GEORGE R.
THOMPSON
PH.D.

June 22, 2024

To Whom It May Concern,

I am an independent toxicologist with 55 years of experience in chemical and product hazard assessments. I have published 21 books on hazardous chemicals, have served as an expert witness in 54 lawsuits, and came out of retirement and invested nearly 500 hours in analyzing the hazards of cargo chemicals on the train and researched the highly hazardous chemicals generated by the incomplete combustion from the fires. I have tabulated by results in a free presentation of approximately 40 PPT charts, if your group would like to either have this presentation as a part of your meeting tomorrow, using the following Zoom

link: <https://us06web.zoom.us/j/87258844697?pwd=aGZzSlDXWXhqRVprUWVFUiIUMzIzUT09>

or you would rather schedule this presentation at your convenience afterwards. The attached Op-Ed summarizes my overall assessment of what is the worst toxicological disaster in my 55 years of experience.

For your NTSB Board Meeting scheduled for tomorrow in East Palestine, I summarize just four of my major concerns regarding the health and safety for exposed individuals and the environment.

1. The 20-Mile Exposure Radius defined in the Settlement Agreement is NOT Supported by the Known Science (see Table 1)

The dynamics of air dispersion from the two East Palestine OH train derailment fires have been independently evaluated using the NOAA HYSPLIT Air Dispersion Module. Predicted plume dispersion commenced at 2:00 AM on Saturday 4 February 2023 and concluded at 2:00 PM on Tuesday 7 February 2023. The first derailment burn occurred late on Friday 3 February 2023. The second, "controlled" burn was initiated on Monday 6 February 2023 to avoid the erroneously feared Vinyl Chloride tank explosion.

The plume from the initial fire first headed SE over Pittsburgh about 50 miles away by 10:00 AM 2/4/23. However, the plume expanded into the NE and extended over Lake Erie (about 95 miles away) and Lake Ontario (over 250 miles away) by 10:00 PM that first day. This NE plume continued to expand across NW New York State and southern Canada through Sunday 5 February 2023.

After the so-called "controlled" burn was ignited on Monday 6 February 2023, three separate plumes formed by 6:00 AM: (1) a small mass over southern Canada, (2) a large mass in central New York along Lake Erie, and (3) a third plume east from East Palestine into Pennsylvania. By 2:00 PM the eastern Ohio plume drifted across northern West Virginia, and Virginia, central Pennsylvania to Maryland and Washington, D.C. (285 miles away). During this same time, the New York plume expanded SE across New York, NE Pennsylvania, NW New Jersey, and western Vermont (over 600 miles away). On Tuesday 7 February 2023, the northerly plume from East Palestine crossed eastern Ohio, and Lake Erie into southern Canada across the Ontario peninsula to Lake Heron (over 300 miles away).

This independent plume dispersion analysis identified over 126,000 square miles affected in over 8 states, plus additional thousands of square miles in southern Canada. The distance of the dispersed plumes from East Palestine were not circular, as assumed at a 20-mile radius in the settlement, but was expansive, 600 miles eastwardly, at least 300 miles northerly, and 285 miles southerly across eight different states and much of southern Canada from Lake Heron to Lake Ontario.

Most of the millions of people living in this vast area do not even recognize that they were potentially exposed to "forever" chemicals that can shorten their lives, affect their homes and gardens,

pollute farm animals and grounds, as well as water supplies. The NTSB needs to alert state and federal agencies to the vast extent of the pollution dispersion miles beyond East Palestine and require that Norfolk Southern railroad fund additional testing and research in the much more extensive exposure zone and that this program is overseen by an independent panel of experts to assure proper tests are run using appropriate protocols, with release of interim and final results to the public.

2. Exposures to Highly Hazardous Chemicals Produced by These Fires Are Unprecedented (see Figure 1 & Table 2)

Independent toxicological analyses of the chemicals and products on the railcars before, and highly hazardous chemicals released after, the fires revealed the East Palestine Ohio train derailment and fires were unprecedented and may become the worst chemical medical disaster in history. Of the 52 railcars listed on the initial Norfolk southern manifest, 17 were identified by Norfolk Southern as burned and another 15 were identified as "impinged." These 52 cars contained 24 different chemicals or products. In their original shipped state, 20/52 railcars contained inert/safe products (e.g., plastic pellets, semolina flour, flakes/powder, metal products, automobiles, frozen vegetables, etc.). The remaining 32 cars contained various types of chemical products.

Prior to the fires, railcar contents included eight chemicals that are known to cause cancer, eight that are allergens, five that cause kidney and liver disease, three that can cause lung injuries, and three that can produce reproductive effects. Subsequent chemicals produced and released into the air by the fires included an additional 120 chemicals known to cause cancer, five that are allergens, 13 that are toxic to the kidney and liver, 11 that cause reproductive effects, 65 that cause brain effects, 45 that damage the heart, 22 that cause asthma, 9 that are corrosive to skin/eyes/throat/lungs, 5 that disrupt hormones, and 3 that are absorbed through the skin (Table 2). The 17 railcars reported by NS as burned contained 5,360,000 pounds of chemicals, the 15 additional "impinged" cars contained 3,220,000 pounds of material, for a total poundage of 8,580,000 pounds of highly hazardous materials released by the fires into the air, and many cause diseases that can be delayed in their onset by 10-20 years. For example, according to the World Trade Center Health Program, 2,977 people died on 9/11, but over 71,000 individuals have been diagnosed with physical and mental health conditions in the past 20 years brought on by exposure to the dust, smoke, debris, and trauma of the 9/11 attacks. Similarly, deaths, physical, and mental health conditions will continue to develop in individuals exposed across thousands of square miles to the fire plumes from the East Palestine disaster for decades to come.

Toxicologic chemical hazard assessments are routinely evaluated on the basis of exposure to a single hazardous chemical at levels that are then compared to OSHA, EPA, or other agency designated "safe" levels. That usual paradigm is NOT applicable to the chemical "stew" released by the East Palestine fire (Figure 1). Literally hundreds of highly toxic chemicals were created and released simultaneously by the incomplete combustion and fire plume that then dispersed, not just into 20 miles surrounding the East Palestine community, but across the thousands of square miles in eight states and southern Canada. There is no precedent for assessing the potential health and environmental effects of such a complex, apocalyptic event. The closest approximation would be the burn pits our military personnel were exposed to in Iraq and Afghanistan. The broad-based medical symptoms of those exposed individuals are similar to the 95 reported symptoms in individuals in East Palestine, but symptoms from the Gulf War Syndrome have not yet been fully defined, understood, nor clinically agreed upon over the past 34 years.

Many highly hazardous causative chemicals from the East Palestine fire were either not analyzed for, or were sampled at inappropriate times or using inappropriate tests. Independent chemical sampling has revealed "forever" dioxin chemicals in home-grown garlic and home heating furnace filter wipe samples. Polynuclear aromatic hydrocarbons (PAHs) have been independently identified in East

Palestine stream sediments and streambeds. The severe long-term health effects from both dioxins, PAHs and other emission products from the East Palestine fires are listed in the attached Table 2.

Independent compilation and analyses of the 1,500 pages of East Palestine dioxin-related test results found buried on the EPA Website further warrant additional health assessments by independent scientists who can also compile other various sources of existing data, as well as extend their sampling to additional areas beyond the 20-mile radius.

3. The Expected Latency Period from Large Population Exposures to the Fire-Generated Chemical "Stew" Prevents Delayed

Health Injuries from Being Accurately Estimated (see Table 2)

The perspective for a disaster is often gauged by the short-term impact, rather than the potential for cumulative losses over the long-term. For example, the 9/11 terrorist attack is most remembered for the 2,974 deaths that occurred on that first disastrous day. Few people are aware that in the 20 years since 9/11, 4,343 survivors and first responders died (an increase of 143%), according to the World Trade Center Health Program. In addition, over 71,000 people have been diagnosed with physical, and mental health conditions brought on by exposures to the dust, crushed glass, asbestos and the multitude of chemicals created by the initial fires, as well as the 9/11 3-month long smoldering fires. Cancers like mesothelioma are just now starting to be diagnosed.

The East Palestine apocalypse is a much more insidious disaster. There were no immediate deaths in Ohio. The federal EPA Administrator and the Ohio Department of Health announced within a few days after the derailment and fires that the air, water, and soil in East Palestine were "safe". Suffering residents were dumbfounded! Now a year later, these agency statements have proven not to be true!

Two months after the disaster, seven workers from the Centers for Disease Control came to East Palestine to evaluate the local health conditions. All seven went home due to a "mystery illness" they contracted while in East Palestine. In late February 2024 (a year after the derailment and fires), a graduate student on assignment from Texas A&M University came to East Palestine to conduct her research. She immediately experienced the same headaches, irritated nose and throat with labored breathing experienced by local residents. Similarly, an Internet report from a family in Canada near Niagara Falls, reported intense headaches and irritated respiratory systems during the East Palestine Ohio disaster. The East Palestine symptoms have persisted for over a year now, despite the fact that no one died directly from the derailment and fires.

Analysis of the Chemical Fire Products (Table 2) reveals the following concerns about long-term (delayed) toxicological effects from these chemical exposures, whether in and around East Palestine, or at far-reaching remote locations affected by the plume dispersion of the chemical "stew":

- More than 120 released chemicals are known to cause cancer
- 21 different body organs & organ systems are known to develop cancer from these chemical exposures
- The 13 petroleum trace elements are known to promote cancers actually caused by the other chemicals
- The fire-produced chemicals cause serious noncancerous diseases in 9 different body organs

The timeline of diseases produced from the 9/11 terrorist attacks progressed from PTSD and anxiety at 1-6 months, to decreased birth weights of babies of pregnant women at 5-9 months, respiratory issues start to increase from 2-8 years, cancer diagnoses begin to rise at 2-10 years, drug and alcohol abuse grows at 2-10 years due to chronic PTSD, cardiovascular disease steadily increases at 8-16 years, and latent cancers (e.g., male breast cancers, mesothelioma) evolve at 11-20 years. Although a single case of male breast cancer has already been reported in East Palestine, other

predominant symptoms are thus far closely following the 9/11 sequence of symptoms and disease development.

NTSB must assure that Norfolk Southern fund an East Palestine Health Center Program, similar to the World Trade Center Health Program, that will actively recruit free enrollment by anyone within the NOAA HYSPLIT Air Dispersion Model predicted exposure area and provide an active health monitoring and advisory support service for the next 30 years. Over the past year, disaster “seeds” for large scale future illnesses have been planted, and the NTSB must help assure that those already injured, but waiting to identify their injuries, are properly included in the Norfolk Southern funding requirements.

4. Newly Funded Research at Six Universities will Provide Critical Information Not Previously Available to the NTSB

The National Institute of Environmental Health Sciences (NIEHS) funded six research projects specific to the East Palestine Ohio train derailment and associated chemical exposures:

1. *Case Western Reserve University* – Frederick Ray Schumacher, Ph.D. Principal Investigator

This research team will talk to East Palestine residents to better understand their experiences

and concerns during and after the disaster and initiate a long-term follow-up study to better understand the impact of chemical exposures on health caused by DNA damage.

2. *Texas A&M University* – Natalie Johnson, Ph.D. Principal Investigator

This team will utilize a mobile air sampling strategy to rapidly characterize potential health risks

from hazardous volatile organic chemical (VOC) exposures in the after math and recovery phases of this disaster.

3. *University of California, San Diego* – Beatrice Golomb, M.D., Ph.D. Principal Investigator

These researchers have conducted interviews with affected East Palestine residents to assess

the 2-3-year health impacts of being exposed to a mixture of toxins.

4. *University of Kentucky* – Erin Hayes, Dr. P.H.

This research team will utilize an online survey to collect longitudinal measures of health

symptoms, stress, and well-being of East Palestine residents and establish a research network to help disseminate research findings to the community.

5. *University of Pittsburgh* – Peng Gao, Ph.D. Principal investigator

This team will collect soil, water, and sediment samples to assess the extent of chemical contamination and document the ongoing impact on the region’s local environment and highly connected waterways.

6. *University of Pittsburgh* – Julianne Beier, Ph.D. and Maureen Lichtveld M.D.,

M.P.H. Principal

Co-Investigators

This project will collect water and air samples in the homes of East Palestine residents

And collect blood samples and other health data to assess impacts of vinyl chloride and other chemicals on the liver.

The Ohio Rural Health Association has scheduled a virtual webinar on 14 August 2024 where each of these universities will report the current status of their research projects. Their findings can significantly affect the scope of injuries and damages, expand the size of the class action

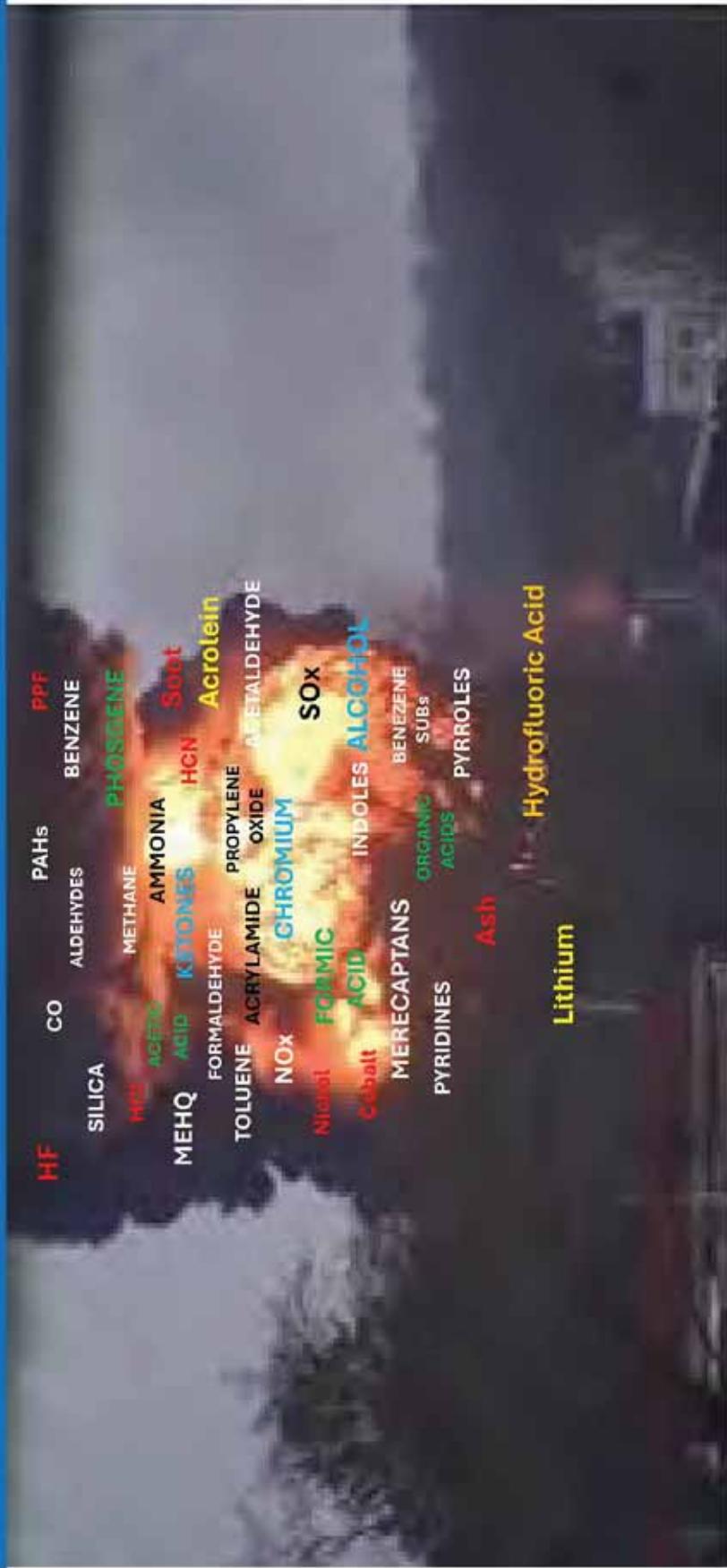
members, and the damages to be covered – particularly damages related to latent and delayed health effects that can be manifest decades from now, or even in future generations. Research previously presented to the NTSB and conducted by Norfolk Southern and EPA contractors focused predominantly on a narrow range of chemicals rather than the large numbers of “forever” chemicals produced by the fire. The University of California group in particular has prior experience in assessing health effects in mixtures of fire-generated highly hazardous chemicals. Agencies, including NTSB, must allow sufficient time for this highly complex, apocalyptic disaster to be thoroughly researched and analyzed to assure maximum protection for exposed individuals and the environment

Please let me know when you would like to see the PPT presentation, or if I can be of help in any other way.

Best regards,

George R. Thompson, PhD
President & CEO
Chemical Compliance Systems, Inc.
georgethompson@chemply.com

Figure 1. The East Palestine Apocalyptic Fire – A Chemical “Stew”



**Table 1. East Palestine OH Train
Derailment & Fire**

Plume Disbursement

| Date | Time | Plume Location and Description |
|-----------------|-------------|--|
| Saturday 2/4/23 | 0200-0400 | Plume starts SE into western PA towards Pittsburgh |
| | 1000-1200 | Plume initially SE into PA over Pittsburgh |
| | 1200-1400 | Plume SE & expands to NE into western PA over Pittsburgh & slightly beyond |
| | 1600-1800 | Plume shifts NNE into western NY to Lake Erie & expands eastward in NW PA & W NY |
| | 2000-2200 | Plume extends over Lake Erie & eastern Lake Ontario |
| Sunday 2/5/23 | 0600-0800 | Plume expanded NE across western PA, western NY & Lake Erie to Lake Ontario |
| | 1000-1200 | Plume extended NE across western PA, western NY, Lake Erie to Lake Ontario – larger plume mass |
| | 1600-1800 | Plume expanded NE further into southern Canada across 2 Great Lakes, NW NY & southern Canada – longer modeled plume |
| Monday 2/6/23 | 0000-0200 | Smaller plume over western PA & western NY to Lake Erie, small plume in southern Canada |
| | 0400-0600 | Small mass of Plume over southern Canada, large mass in central NY along Lake Erie, Third plume east from East Palestine (3 separate plume portions) |
| | 0800-1000 | Plume east into central PA, re-connects with central NY mass = large, combined mass, Canada plume above VT |
| | 1000-1200 | Large plume mass now in central PA/NY, Canada mass much smaller, no plume in eastern NY or southern VT |
| | 1400-1600 | Eastern OH plume SE across northern WV & VA, central PA to MD & Washington D.C., NY plume in SE NY/NE PA/NW NJ/ W VT |
| | 1600-1800 | OH plume SE across SW PA, northern WV & VA, to MD & near Washington D.C., NJ plume very small |
| | 2000-2200 | OH plume SSE across SE PA, NW WV, NJ plume gone |
| Tuesday 2/7/23 | 0600-0800 | OH plume SSE across northern WV, northern OH plume across Lake Erie, large plume masses both north & south |
| | 1000-1200 | OH plume SE across NE WV, northern plume across eastern OH & Lake Erie into southern Canada across southern Ontario peninsula to Lake Heron |
| | 1200-1400 | OH mass SSE across NE WV, northern OH plume massive & crosses Lake Erie into Canada |

Table 2. Chemical Fire Products in East Palestine OH Train Derailment

| Chemical or Product | Chemicals Released by Fire | Health Hazards from Emitted Pollutants |
|---------------------|--|--|
| 1. Polypropylene | Soot Ash/Particulates w/ Persistent Free Radicals Polycyclic Aromatic Hydrocarbons (PAHs) Carbon Monoxide Dioxins Aldehydes | Cancers – lung & bladder – Asthma, Heart Disease, Death Lung Inflam. & Cancer – lung - Asthma, Cardiovascular Disease, COPD, Persistent in Air Cancers – lung, skin, bladder, scrotum – Male/Female Reproduction, COPD; Cardiovascular Disease; Confusion; Mutagens Headache, Nausea, Dizziness, Malaise, Seizures, Coma Cancer – breast, pancreas, colon - Liver/Immune/Cardiovascular Diseases, Chloracne; Persist. Env. Pollut.s; Hormone Disruptors Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L (skin, eyes, nose, throat, lungs) Irritant, Headache, Dizziness, Fainting |
| 2. Polyethylene | Soot Ash/Particulates w/ Persistent Free Radicals Polycyclic Aromatic Hydrocarbons (PAHs) Carbon Monoxide Dioxins Aldehydes | Cancers – lung & bladder – Asthma, Heart Disease, Death Lung Inflam. & Cancer – lung - Asthma, Cardiovascular Disease, COPD, Persistent in Air Cancers – lung, skin, bladder, intestine – Male/Female Reproduction COPD; Cardiovascular; Confusion; Mutagens Headache, Nausea, Dizziness, Malaise, Seizures, Coma Cancer – breast, pancreas, colon - Liver/Immune/Cardiovascular Diseases, Chloracne; Persist. Env. Pollut.s; Hormone Disruptors Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting |

| | | |
|---|--|--|
| <p>3. Vinyl Chloride Stabilized (Phenol) <i>[Highly mobile in soils & water]</i></p> | <p>Hydrochloric Acid Formaldehyde Phosgene Dioxins</p> <p>Carbon Monoxide Phenol Methane</p> | <p>Corrosive S/E/T/L, Allergen Cancer – nose, blood – Corrosive S/E/T/L, Allergen Extreme Irritant – skin/eye/nose/throat/lung inflame & edema; Death Cancer – breast, pancreas, colon - Liver/Immune/Cardiovascular Diseases, Chloracne; Persist. Env. Pollut.s; Hormone Disruptors, S/E/T/L Irritant, Headache, Nausea, Dizziness, Malaise, Seizures, Coma Corrosive – skin, eyes, nose, throat, lungs; Liver/Kidney/CNS Damage Headache, Dizziness, Nausea, Loss of Coordination, Cognitive Impairment, Heart Palpitations, Asphyxia</p> |
| <p>4. Dipropylene Glycol</p> | <p>Aldehydes Ketones</p> <p>Carbon Monoxide</p> | <p>Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting Irritants S/E/T/L ,>Blood Sugar, Breathing Difficulty, Pain, Headache, Nausea, Dizziness, Confusion, Coma Headache, Nausea, Dizziness, Malaise, Seizures, Coma</p> |
| <p>5. Propylene Glycol</p> | <p>Propylene Oxide Formaldehyde Acetaldehyde Carbon Monoxide</p> | <p>Cancer – nose; Mutagen, S/E/T/L Irritant; Nausea, Emesis, Abdomen Pain; Headache, Dizziness, Fainting Cancer – nose, blood - Corrosive S/E/T/L, Allergen Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting Headache, Nausea, Dizziness, Malaise, Seizures, Coma</p> |
| <p>6. Diethylene Glycol</p> | <p>Aldehydes Ketones</p> <p>Formic Acid</p> <p>Carbon Monoxide</p> | <p>Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting Irritants S/E/T/L ,>Blood Sugar, Breathing Difficulty, Pain, Headache, Nausea, Dizziness, Confusion, Coma Irritant S/E/T/L, Headache, Dizziness, Nausea, Emesis, Kidney Damage, Skin Absorbed Headache, Nausea, Dizziness, Malaise, Seizures, Coma</p> |

| | | |
|------------------------------------|--|---|
| 7. Ethylene Glycol Monobutyl Ether | <p>Aldehydes</p> <p>Ketones</p> <p>Formic Acid</p> <p>Acetic Acid</p> <p>Carbon Monoxide</p> | <p>Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting Irritants S/E/T/L, >Blood Sugar, Breathing Difficulty, Pain, Headache, Nausea, Dizziness, Confusion, Coma Irritant S/E/T/L, Headache, Dizziness, Nausea, Emesis, Kidney Damage, Skin Absorbed Irritant S/E/T/L, Lung edema, Bronchitis Headache, Nausea, Dizziness, Malaise, Seizures, Coma</p> |
| 8. Semolina (Flour) | <p>Soot</p> <p>Ash/Particulates w/ Persistent Free Radicals</p> <p>Polycyclic Aromatic Hydrocarbons (PAHs)</p> <p>Acrylamide</p> <p>Carbon Monoxide</p> <p>Dioxins</p> | <p>Cancers – lung & bladder – Asthma, Heart Disease, Death Lung Inflam. & Cancer – lung - Asthma, Cardiovascular Disease, COPD, Persistent in Air</p> <p>Cancers – lung, skin, bladder, scrotum – Male/Female Reproduction COPD; Cardiovascular Disease; Confusion; Mutagens</p> <p>Cancers – ovarian, kidney, endometrial</p> <p>Headache, Nausea, Dizziness, Malaise, Seizures, Coma</p> <p>Cancer – breast, pancreas, colon - Liver/Immune/Cardiovascular Diseases, Chloracne; Persist. Env. Pollut.s; Hormone Disruptors</p> <p>Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting</p> |
| 9. Ethylhexyl Acrylate | <p>Carbon Monoxide</p> <p>Nitrogen Oxides</p> <p>Methane</p> <p>MEHQ</p> | <p>Headache, Nausea, Dizziness, Malaise, Seizures, Coma</p> <p>Irritant S/E/T/L, Bronchitis, Asthma, Lung Edema, COPD</p> <p>Headache, Dizziness, Weakness, Loss of Coordination & Judgment, Mood Changes, Memory Loss, Asphyxiant Corrosive & Poisonous Fumes</p> <p>Corrosive S/E/T/L, Allergens, Liver Disease, Nephropathy, Coagulation Disorders and Nervous System Disorders.</p> |
| 10. Polyvinyl (Alcohol) | <p>Organic Acids</p> | |

| | | |
|---|---|--|
| | Aldehydes | Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting Confusion, Poor Judgment, Emesis, Seizures, Hepatitis, Liver Cirrhosis, Cancer – breast, mouth, throat, esophagus, liver, colon, rectum |
| | Alcohol | Headache, Nausea, Dizziness, Malaise, Seizures, Coma |
| | Carbon Monoxide | |
| 11. Petroleum Lube Oil <i>(Distillate Oil)</i> | <p>Soot Ash/Particulates w/ Persistent Free Radicals Polycyclic Aromatic Hydrocarbons (PAHs)</p> <p>Carbon Monoxide Nitrogen Oxides (NO_x)</p> <p>Sulfur Oxides (SO_x)</p> <p>Aldehydes</p> <p>Substituted Benzenes</p> <p>[Trace Elements ≥13]</p> | <p>Cancers – lung & bladder – Asthma, Heart Disease, Death Lung Inflamm. & Cancer – lung - Asthma, Cardiovascular Disease, COPD, Persistent in Air</p> <p>Cancers – lung, skin, bladder, scrotum – Male/Female Reproduction, COPD; Cardiovascular Disease; Confusion; Mutagens Headache, Nausea, Dizziness, Malaise, Seizures, Coma Inflammation of Airway, Lung Edema, Bronchitis, Bronchiolitis, Emphysema, COPD, Headache, Fatigue, Dizziness, Blue Skin/Lips, Increased Respiratory Infect.s, Air Acidification</p> <p>Cancer – lung, larynx - Irritant S/E/T/L, Asthma, Bronchitis, Air Acidification, Sulfur Particulates</p> <p>Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting</p> <p>Cancers – blood, kidneys, lungs, liver - S/E/T/L Irritant, Bronchitis, Headache, Narcolepsy, Fainting, Hand Coordination</p> <p>Cancers (12/13 Elements) – bladder, brain, bronchi, kidney, lung, nose, skin, trachea – Cancer Promotor</p> <p>[Many Other Toxins = Mercaptans, Phenols, Pyridines, Pyroles, Indoles & Carbazoles]</p> <p>Similar Hazards to Other Listed Petroleum Constituent Hazards (See #'s 14 , 15, and above for #11): Many of These Toxin Emissions May Be Bound to Soot & Particulate Emissions</p> |

| | | |
|---------------------------------------|---|---|
| 12. Isobutylene | Carbon Monoxide | Headache, Nausea, Dizziness, Malaise, Seizures, Coma |
| 13. Butyl Acrylates Stabilized (MEHQ) | Carbon Monoxide Nitrogen Oxides Methane METHQ | Headache, Nausea, Dizziness, Malaise, Seizures, Coma Irritant S/E/T/L, Bronchitis, Asthma, Lung Edema, COPD Headache, Dizziness, Weakness, Loss of Coordination & Judgment, Mood Changes, Memory Loss, Asphyxiant Corrosive & Poisonous Fumes |
| 14. Petro Oil, NEC (Residual Oil) | Soot Ash/Particulates w/ Persistent Free Radicals Polycyclic Aromatic Hydrocarbons (PAHs) Carbon Monoxide Nitrogen Oxides (NO _x) Sulfur Oxides (SO _x) Aldehydes Substituted Benzenes [Trace Elements ≥13] | Cancers – lung & bladder – Asthma, Heart Disease, Death Lung Inflamm. & Cancer – lung - Asthma, Cardiovascular Disease, COPD, Persistent in Air Cancers – lung, skin, bladder, scrotum – Male/Female Reproduction, COPD; Cardiovascular Disease; Confusion; Mutagens Headache, Nausea, Dizziness, Malaise, Seizures, Coma Inflammation of Airway, Lung Edema, Bronchitis, Bronchiolitis, Emphysema, COPD, Headache, Fatigue, Dizziness, Blue Skin/Lips, Increased Respiratory Infect.s, Air Acidification Cancer – lung, larynx - Irritant S/E/T/L, Asthma, Bronchitis, Air Acidification, Sulfur Particulates Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting, Cancers – blood, kidneys, lungs, liver - S/E/T/L Irritant, Bronchitis, Headache, Narcolepsy, Fainting, Hand Coordination Cancers (12/13 Elements) – bladder, brain, bronchi, kidney, lung, nose, skin, trachea – Cancer Promotor Similar Hazards to Other Listed Petroleum Constituent Hazards (See #'s 11, 15, and above for #14): Many of These Toxin Emissions May Be Bound to Soot & Particulate Emissions |
| 15. Additives, Fuel | Soot Ash/Particulates w/ | Cancers – lung & bladder – Asthma, Heart Disease, Death Lung Inflamm. & Cancer – lung - Asthma, Cardiovascular |

| | | |
|--|--|--|
| | Persistent Free Radicals Polycyclic Aromatic Hydrocarbons (PAHs) Carbon Monoxide Nitrogen Oxides (NO _x) Sulfur Oxides (SO _x) Aldehydes | Disease, COPD, Persistent in Air Cancers – lung, skin, bladder, scrotum – Male/Female Reproduction, COPD; Cardiovascular Disease; Confusion; Mutagens Headache, Nausea, Dizziness, Malaise, Seizures, Coma Inflammation of Airway, Lung Edema, Bronchitis, Bronchiolitis, Emphysema, COPD, Headache, Fatigue, Dizziness, Blue Skin/lips, Increased Respiratory Infect.s, Air Acidification Cancer – lung, larynx - Irritant S/E/T/L, Asthma, Bronchitis, Air Acidification, Sulfur Particulates Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting, Cancers – blood, kidneys, lungs, liver - S/E/T/L Irritant, Bronchitis, Headache, Narcolepsy, Fainting, Hand Coordination Cancers (12/13 Elements) – bladder, brain, bronchi, kidney, lung, nose, skin, trachea – Cancer Promotor |
| | Substituted Benzenes [Trace Elements ≥13] [Many Other Toxins = Mercaptans, Phenols, Pyrroles, Pyridines, Indoles & Carbazoles] | Similar Hazards to Other Listed Petroleum Constituent Hazards (See #'s 11 , 14, and above for #15); Many of These Toxin Emissions May Be Bound to Soot & Particulate Emissions |
| | 16. Benzene (Empty?) | |

| | | |
|---------------------------|---|---|
| 17. Paraffin Wax | Soot Toluene | Cancers—lung & bladder – Asthma, Heart Disease, Death Kidney & Liver Damage, Reprod. & Neonatal Effects, Headaches, Nausea, Dizziness, Insomnia, Skin Absorption, Reprod. Toxin Cancer – blood – Anemia, Neonatal Effects, Cancer – nose, blood - Corrosive S/E/T/L, Allergen |
| 18. Flakes, Powder | Depends Upon Type of Flakes | TBD |
| 19. Hydraulic Cement | Depends Upon Burn Status | TBD |
| 20. Malt Liquors | Depends Upon Ball Composition | TBD |
| 21. Balls, CTN, MEDCL (?) | Depends Upon Steel Composition | TBD |
| 22. Sheet Steel | Depends Upon Steel Composition | TBD |
| 23. VEGETABLE, FROZEN | Soot Ash/Particulates w/ Persistent Free Radicals Polycyclic Aromatic Hydrocarbons (PAHs) | Cancers – lung & bladder – Asthma, Heart Disease, Death Cancer – lung - Lung Inflamm., Asthma, Cardiovascular Disease, COPD, Persistent in Air Cancers – lung, skin, bladder, scrotum – Male/Female Reproduction, COPD; Cardiovascular Disease; Confusion; Mutagens Headache, Nausea, Dizziness, Malaise, Seizures, Coma Inflammation of Airway, Lung Edema, Bronchitis, Bronchiolitis, Emphysema, COPD, Headache, Fatigue, Dizziness, Blue Skin/Lips, Increased Respiratory Infect.s, Air Acidification Cancer – lung, larynx - Irritant S/E/T/L, Asthma, Bronchitis, Air Acidification, Sulfur Particulates Cancer – nasopharynx - Cardiovascular Disease, S/E/T/L Irritant, Headache, Dizziness, Fainting, Substituted Benzenes |

| | | |
|--|--|--|
| | [Trace Elements ≥ 13] [Many Other Toxins = Mercaptans, Phenols, Pyridines, Pyrroles, Indoles & Carbazoles] | Cancers – blood, kidneys, lungs, liver - S/E/T/L Irritant, Bronchitis, Headache, Narcolepsy, Fainting, Hand Coordination Cancers (12/13 Elements) – bladder, brain, bronchi, kidney, lung, nose, skin, trachea – Cancer Promotor Similar Hazards to Other Listed Petroleum Constituent Hazards (See #'s 11, 14, 15): Many of These Toxin Emissions May Be Bound to Soot & Particulate Emissions |
|--|--|--|

EXHIBIT 58

67 East Palestine Dioxin Soil Samples vs. Background And Regional Screening Level (“RSL”)

| | |
|--|----|
| East Palestine Number of Dioxin Soil Samples as of June 25, 2024 | 67 |
| Samples >3 ppt TEQ (Rural Background for Non-Impacted Communities) | 47 |
| Samples >4.8 ppt TEQ (Arcadis Proposed RSL Sep 7, 2023) | 32 |
| Samples >6 ppt TEQ (Residential Background for Non-Impacted Communities) | 27 |
| Samples >8 ppt TEQ (Urban/Industrial for Non-Impacted Communities) | 23 |

- 1) Median Dioxin TEQ is 4.4 ppt
- 2) Two Control Samples from Salem, OH: 4.0 ppt TEQ in April-2023 and 4.3 ppt TEQ in June-2023
- 3) **Control Sample from Beaver Circle, Columbiana, OH where Plume Fallout WAS NOT 1.7 ppt TEQ.**

Scott Smith

1

June 25, 2024 Update: Potential Dioxin Hot Zones – Need More Testing

| Dioxin TEQ Soil Comparisons | Parts per Trillion (ppt) | % Increase Over RSL |
|---|--------------------------|---------------------|
| Beaver Circle, Columbiana Control | 1.7 | -58% |
| Salem OH Control Soil | 4.0 | -17% |
| Regional Screening Level (RSL) | 4.8 | - |
| ZG Soil | 23 | 379% |
| TF Soil | 26 | 442% |
| SW Soil | 27 | 463% |
| BD Soil | 27.6 | 475% |
| RTO Soil | 30 | 525% |
| KH Soil | 34 | 608% |
| SG Soil | 49 | 921% |
| Enchanted Salon Soil | 59 | 1129% |
| Norfolk Southern-Arcadis 2-17-23 | 91.9 | 1815% |
| Brushville Supply Soil (1) | 460 | 9483% |
| Brushville Supply Soil (2) | 1900 | 39483% |

1. Norfolk Southern-Arcadis 2-17-23 is a Composite Sample at 91.9 ppt which means that (5) samples were taken and then blended together for (1) TEQ value.

2. Why is this important to understand?

Scott Smith

525

Mixtures of Polycyclic Aromatic Hydrocarbons ("PAH") and Dioxins

| Soil Testing | PAH TEQ (ppb) | Dioxin TEQ (ppt) |
|--------------|---------------|------------------|
| EM Control | 30.6 | 1.7 |
| JS | 119.7 | 5.3 |
| RT | 129.7 | 30 |
| VL | 143.6 | 5.6 |
| BD | 155.7 | 27.6 |
| RK | 291.5 | 9.1 |
| SW | 346.4 | 27.0 |
| LM | 348.6 | 10.0 |
| ZG | 398.7 | 23.0 |
| SG | 420.5 | 8.8 |
| NV | 428.6 | 7.1 |
| AG | 493.1 | 6.8 |
| SMc | 496.3 | 9.4 |
| KF | 506.5 | 10.0 |

3
[REDACTED]
Scott Smith

Mixtures of Polycyclic Aromatic Hydrocarbons ("PAH") and Dioxins

| Soil Testing | PAH TEQ (ppb) | Dioxin TEQ (ppt) |
|--------------|---------------|------------------|
| EM Control | 30.6 | 1.7 |
| KF | 506.5 | 10.0 |
| ES | 705.6 | 59.0 |
| KH May-16 | 883.5 | 27.0 |
| BSH | 1,277 | 1,900 |
| ND | 1,649 | 13.0 |
| KH Sep-25 | 2,306 | 34.0 |
| TF | 2,374 | 26.0 |
| HF | 3,928 | 6.4 |
| MF | 37,202 | 8.4 |

Scott Smith
[REDACTED] 4

EXHIBIT 59



TRANSPORTATION

Norfolk Southern withheld information during East Palestine emergency response, investigators say

The NTSB investigation turned up a series of failures before the wreck and during the response.



The train derailed the evening of Feb. 3, 2023, sparking a fire that burned for days. | Gene J. Puskar/AP

By MIKE LEE

06/25/2024 01:05 PM EDT

Updated: 06/25/2024 01:14 PM EDT



Freight giant Norfolk Southern withheld information from local fire officials as they scrambled to respond to last year's derailment in East Palestine, Ohio,

Norfolk Southern withheld information during East Palestine emergency... <https://www.politico.com/news/2024/06/25/norfolk-southern-east-palest...>

federal investigators said Tuesday — saying the lack of disclosure “compromised the integrity” of the controversial decision to burn off toxic vinyl chloride from the tank cars.

The train derailed the evening of Feb. 3, 2023, sparking a fire that burned for days. Norfolk Southern’s contractors were concerned that five carloads of vinyl chloride were at risk of exploding. To avoid that fate, the contractors told the local fire chief that they needed to “vent and burn” the cars’ contents — a decision that sent a toxic plume of black smoke soaring over the community.

AD

AD

Footage of the billowing plume dominated television coverage and social media commentary about the wreck, and provoked continuing worries among East Palestine residents about the derailment’s long-term health impacts.

During a board meeting in East Palestine on Tuesday to determine what likely caused the accident, the independent National Transportation Safety Board said the maker of the vinyl chloride, OxyVinyls, had told Norfolk Southern that there was no risk of explosion, because the chemical was being transported in modern tank cars designed to better withstand crashes. In addition, the vinyl chloride had been stabilized to prevent a runaway chemical reaction.

Norfolk Southern withheld information during East Palestine emergency... <https://www.politico.com/news/2024/06/25/norfolk-southern-east-palest...>



But the railroad never conveyed that information to the local fire chief and as a result, its contractors proceeded to break open the cars with explosives and ignite the chemicals, investigators said.

“Norfolk Southern’s contractors, who were in control of the derailment scene assessment, compromised the integrity of the vent and burn decision by withholding complete ... information from the incident commander,” Paul Stancil, a hazardous material investigator for the NTSB, said during the meeting.

AD

Norfolk Southern withheld information during East Palestine emergency... <https://www.politico.com/news/2024/06/25/norfolk-southern-east-palest...>

In a statement responding to the hearing, Norfolk Southern said the NTSB had mischaracterized the “vent and burn” decision-making process. The railroad said the local fire chief knew OxyVinyls’ staff was at the scene and could have spoken to them. Norfolk Southern disputed the idea that it had “withheld” information and said “there was no obstacle to them making their views known to the ultimate decision-makers.” In addition, Norfolk Southern said OxyVinyls itself had provided Norfolk Southern with “conflicting information.”

“The vent and burn effectively avoided a potential uncontrolled explosion. There was no loss of life, injuries, or damage to property, and contractors took steps to manage environmental impact,” Norfolk Southern said in an emailed statement.

The railroad’s contractors said last year during an NTSB fact-finding hearing that they were concerned the vinyl chloride would have created an explosion that could have decimated the town.

East Palestine Fire Chief Keith Drabek testified last year that he and Republican Ohio Gov. Mike DeWine were told they had 13 minutes to decide whether to authorize the vent-and-burn procedure.

The NTSB investigation turned up a series of failures before the wreck and during the response, though the most acute failure involved an overheating wheel that wasn’t detected in time. Surveillance video showed sparks and fire coming from an axle on one of the train’s 149 cars for 26 miles before the train derailed.

The train passed two “hot-bearing” detectors that recorded the wheel heating up, and the third detector alerted for the train to be stopped. But by that time, it was too late.

Norfolk Southern withheld information during East Palestine emergency... <https://www.politico.com/news/2024/06/25/norfolk-southern-east-palest...>



The NTSB's meeting — at which the agency will determine the accident's probable cause and make recommendations for prevention — is still ongoing. But so far, attention is focusing on the extent to which the railroad industry is allowed to set its own standards, including for hot bearing detectors, how far apart they're installed, and the temperature at which wheels are considered a concern.

The derailment happened as the crew was trying to stop the train. The fire most likely started when an older model tank car, known as a DOT-111, derailed and burst, spilling a load of butyl acrylate.

The NTSB has been recommending for more than a decade the industry phase out DOT-111 tankers because of their known risk of rupturing, but the industry has consistently lobbied to slow down any changes. The tank cars are currently scheduled to be phased out in 2029. Among NTSB's recommendations is expected to be one to speed up their phase-out.

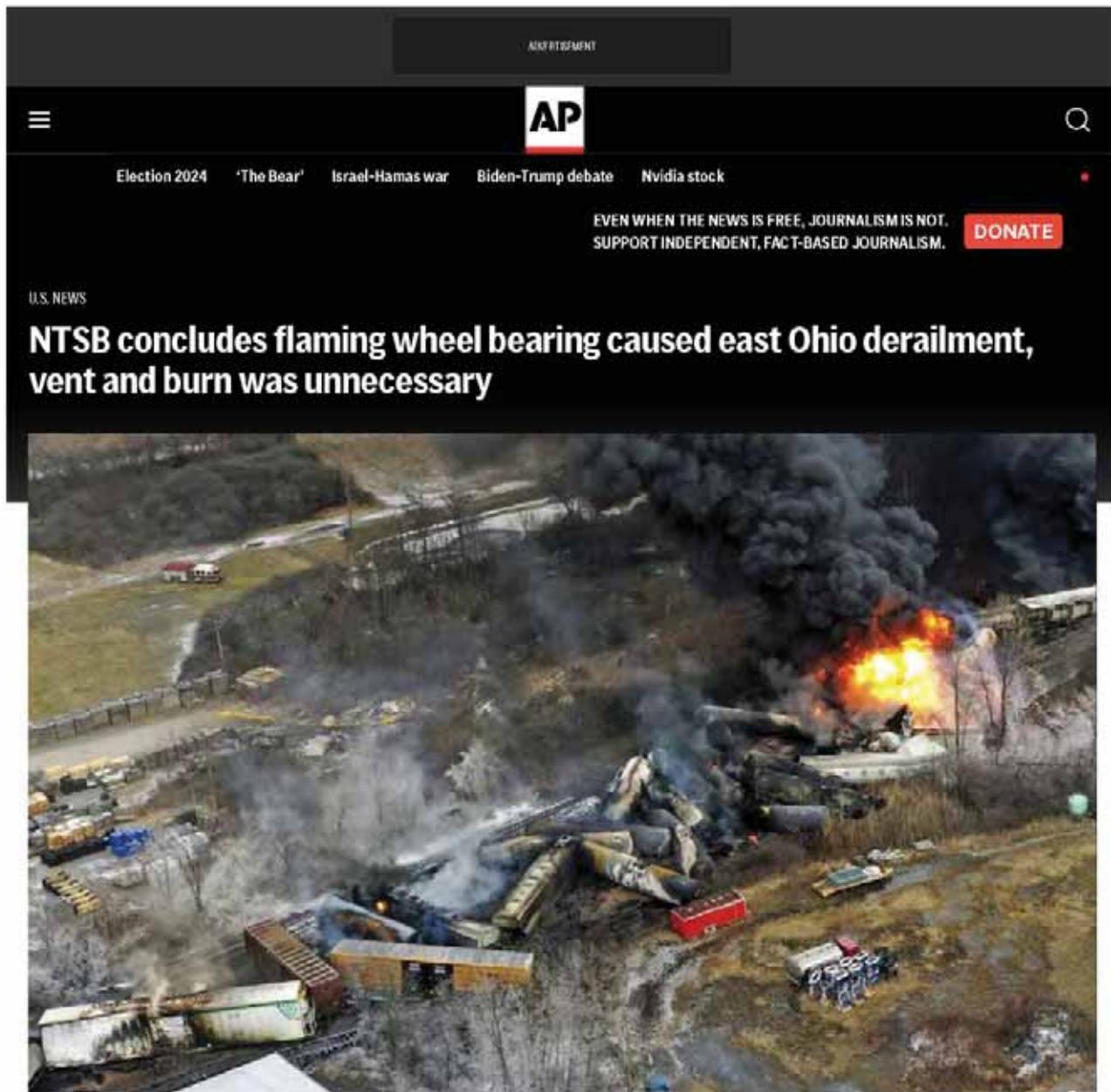
It took more than an hour for Norfolk Southern to send local officials detailed information about the train's cargo. That delayed their decision to evacuate the town, according to testimony.

The safety board meeting is one of the final steps in the response to the wreck. The NTSB staff have said they plan to make a series of recommendations, which the board will vote on approving in a final report to be published in the next few weeks.

Ellie Borst and Chris Marquette contributed to this report.

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NTSB begins hearing on East Palestine, Ohio, train derailment | AP News <https://apnews.com/article/norfolk-southern-train-derailment-ntsb-east-p...>



BY [JOSH FUNK](#), [TOM KRISHER](#) AND [PATRICK ORSAGOS](#)

Updated 4:54 PM EDT, June 25, 2024

EAST PALESTINE, Ohio (AP) — Last year's [disastrous Norfolk Southern train derailment](#) in East Palestine, Ohio, was caused by a wheel bearing that video showed was on [file](#) for more than 20 miles (32.19 kilometers) beforehand but was never caught by trackside detectors that failed to accurately measure the temperatures, the National Transportation Safety Board [confirmed](#) Tuesday. The board also said that Norfolk Southern and its contractors botched a decision three days later to blow open [file](#) tank cars and burn the vinyl chloride inside.

Area residents, rail industry representatives and local and state [officials](#) packed East Palestine High School's auditorium Tuesday to hear the NTSB's investigation [findings](#) and its recommendations to establish federal rules for those detectors and the way railroads respond to them along with reviewing how [officials](#) decide

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whether to ever conduct a vent and burn again.



The board approved more than two dozen recommendations that the railroad, industry and other federal agencies will consider adopting.

Dozens of freight cars derailed Feb. 3, 2023, on the outskirts of East Palestine near the Pennsylvania border, including 11 carrying hazardous materials. Some residents were evacuated that night but days later more had to leave their homes amid fears of an imminent explosion. Despite potential health effects, of ~~officials~~ intentionally released and burned toxic vinyl chloride from ~~five~~ railcars three days after the crash, sending ~~flames~~ and smoke into the air.

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Norfolk Southern said ahead of the NTSB hearing that railroads will examine vent and burn decisions

"On behalf of the entire agency I want to recognize the significant impact this derailment has had," NTSB Chair Jennifer Homendy said at the beginning of the hearing. She added that while some have tried to minimize the wide-reaching effects of the crash because there were no deaths, "the absence of fatality or injury doesn't mean the presence of safety."

The [NTSB had said](#) early on that an overheated bearing on one of the railcars that was not caught in time by trackside sensors had likely caused the crash. [Investigative hearings](#) since then highlighted other possible contributors including [widespread rail job cuts and rushed inspections](#), and also delved into why officials chose to [deliberately vent and burn](#) the vinyl chloride.



After confirming on Tuesday the trackside detector failure, NTSB investigators aid that Norfolk Southern and its contractors compromised the integrity of the vent and burn decision by withholding accurate information from Oxy Vinyls, the company that made the vinyl chloride, including evidence that the tank cars were cooling after the crash.

"Norfolk Southern and its contractors continued to assert the necessity of a vent and burn, even though available evidence should have led them to re-evaluate their initial conclusion," investigator Paul Stancil said.

The railroad defended the decision again Tuesday and said it was based on more than just temperature readings. Officials also had concerns about the way the pressure relief devices malfunctioned on the tank cars. It added that nothing kept Oxy Vinyls from joining the discussion in the command center and sharing its opinion about the tank cars.